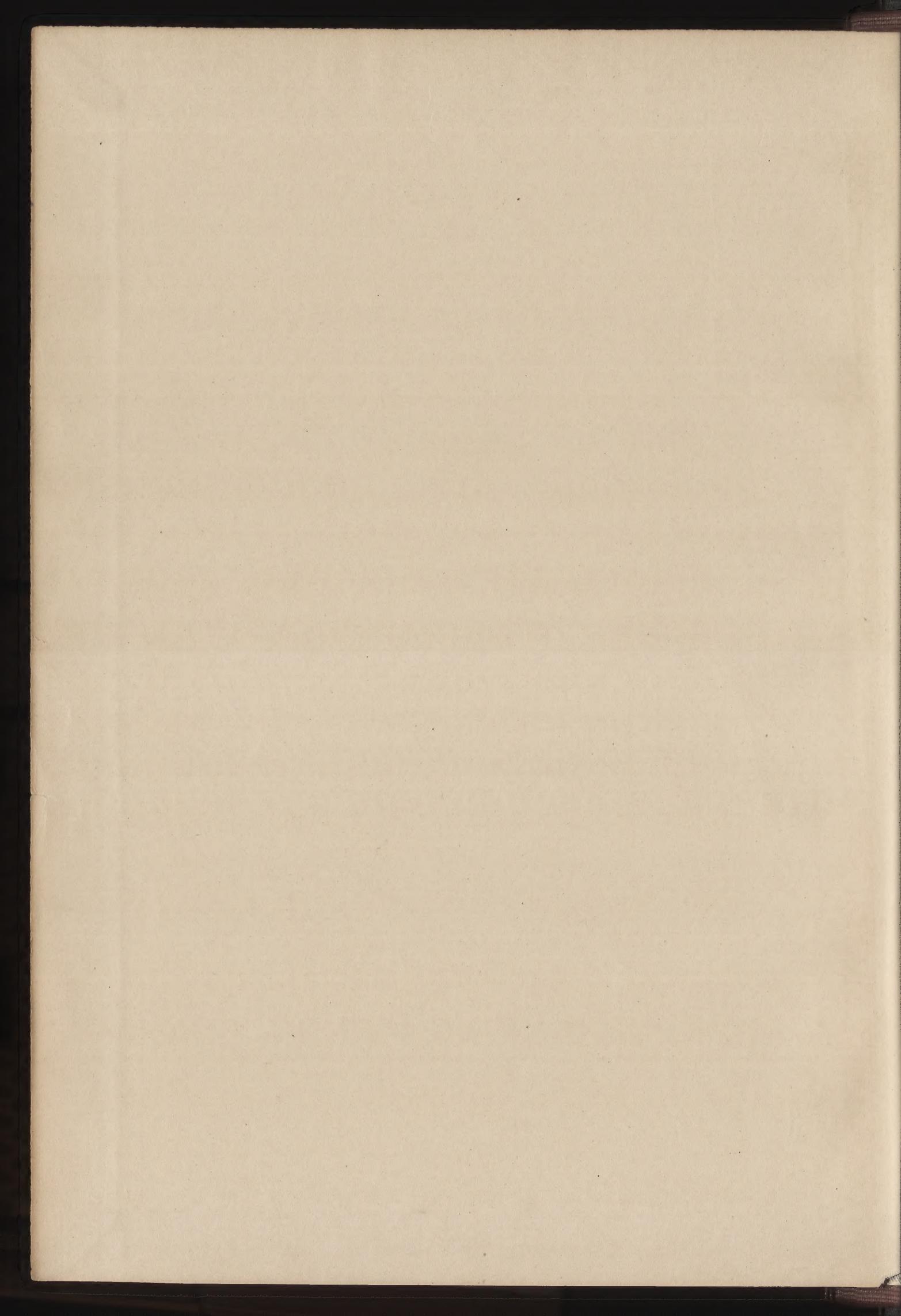




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VOLUME VI JANUARY 1925 NUMBER :

LIVING ARCHITECTURE ✓

WHEN we review the architectural styles that represent the various historic periods in various countries from the earliest times to date, when we take a birds-eye view of the world's architectural development; we are impressed by the evidences of change, of progress, of originality properly linked together with tradition, and the work of our own times appears to be deficient in evidence of this progress. This inference may not be entirely true, it probably is not entirely true for it is not fair to expect great changes in a relatively short period or, perhaps, as rapid artistic advancement under present-day conditions as took place in the past under the stimulus of a re-birth of culture or under the patronage of royalty or of nobility bent upon creating the most pleasing setting for its life and upon impressing its stamp upon the art of its time.

That great changes in our architecture have taken place in the past few years we all recognize, but upon the questions of the worth of the innovations and of the success with which the new problems have been met there is, naturally, disagreement. We are so close to the work that it is difficult to see the thing as a whole.

The important thing is to try to create living architecture. Many men are trying with considerable success, we think, making designs that meet the practical requirements of today, that express the spirit of today and that have the proper relation to the work of the past. It would be well if everyone were doing his best in this direction. There are so many influences that tend to draw the student and the architect in other directions. For one thing, there is a common misconception of the use of documents. There is, in many quarters, too much tendency to copy instead of drawing inspiration for new designs from old works. There are on the other hand a few men who show either a willful disregard for or ignorance of traditional design. The student should not lose sight of the fact that the study of the architecture of the past is only a means of development intended to make him better able to create. Old work or drawings of old work should be studied for the purpose of grasping the basic principles of design as exemplified in these works and of acquiring a vocabulary of forms for modification as the case may demand. Examples of the use of documents have been published in PENCIL POINTS during the past year. In the May number we showed how John Mead Howells evolved the design for the Harper-Poor Mausoleum in Woodlawn Cemetery on the basis of an Italian chapel shown in Letarouilly. As will be seen by reference to that issue, the conditions of Mr. Howells' problem brought about the use of pilaster caps only instead of the full pilasters found on the old Italian building and other marked differences in-

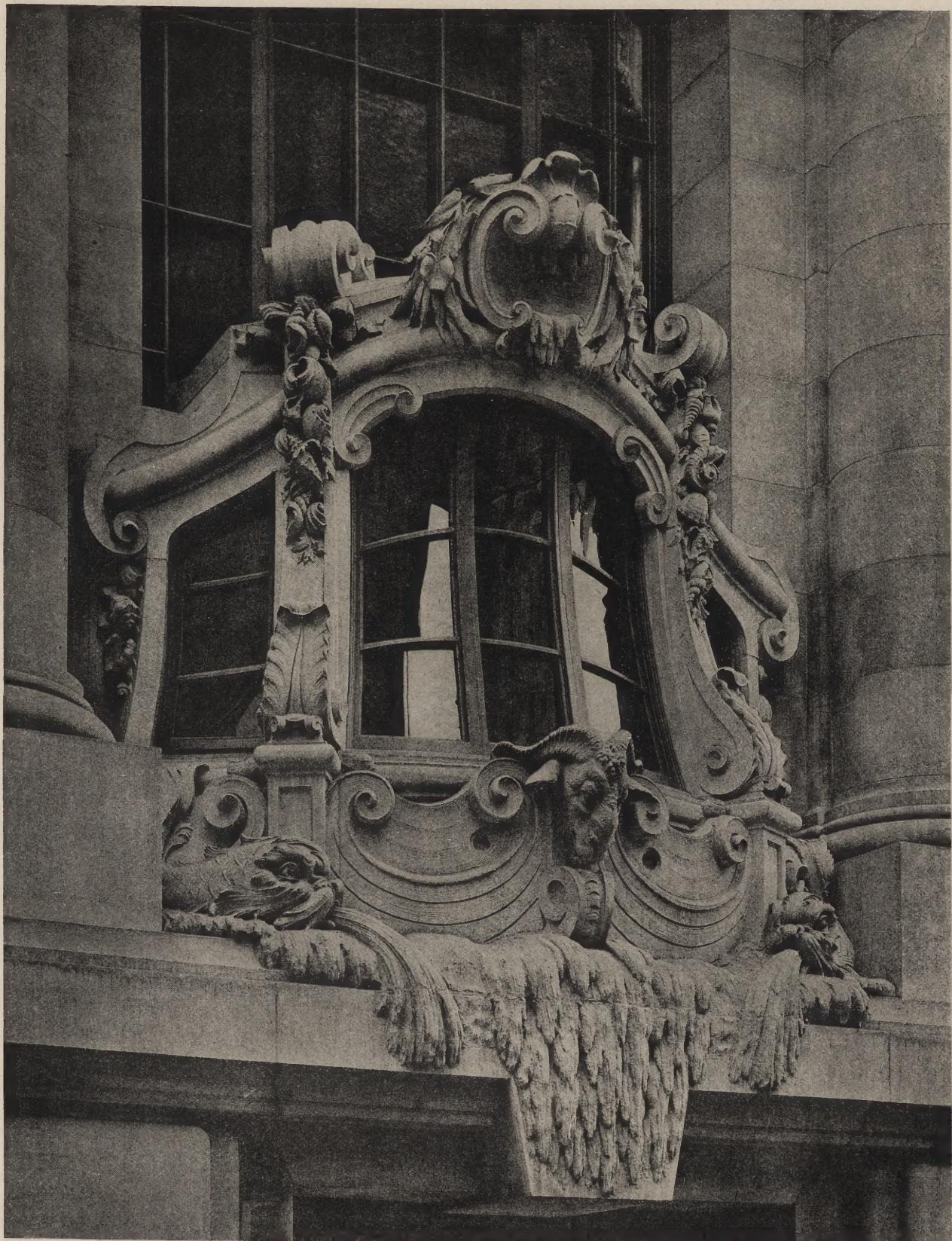
cluding the use of a single huge piece of marble in place of the tile roof of the Italian prototype. In the July issue was shown the document given by Harvey Corbett as the inspiration for his design for the Masonic National Washington Memorial at Alexandria, Va., namely the lighthouse at the ancient port of Ostia, as shown in a restoration in D'Espouy. While Mr. Corbett's Washington Memorial bears a resemblance to the design shown in the document in that he kept the idea of this beacon in mind while designing the memorial and the general plan of the grounds is similar in shape to that of the harbor at Ostia, as shown in the restoration, there is no very close resemblance between Mr. Corbett's design and the document to which he attributes his inspiration. The big conception of the lighthouse and harbor at Ostia happened to fit in with the architect's idea of the right kind of memorial to Washington and he availed himself of so much of the documentary material as seemed useful.

Undoubtedly the most widely discussed building in the country for the past some months has been Raymond Hood's impressive black tower on Fortieth Street, for the American Radiator Company. This building of course has sound historic tradition back of it despite the popular belief that it is radically modern. To make a big black building with touches of gold for relief was a daring thing, justified by the results. One of the things we believe Mr. Hood had in mind was getting away from the unfortunate appearance produced in most office buildings by the windows that appear as small dark rectangles too assertive to be considered as producing texture and of not enough importance to be regarded as architectural features, resulting in what has been described as "a waffle-iron effect." Making the building black gives it solidity of tone.

We have mentioned these three examples of living architecture, not because they are the only ones by any means, or because we are narrow enough to think that the Island of Manhattan, even with Brooklyn and the Bronx thrown in for good measure, constitutes the whole architectural world, but because we happen to be very well acquainted with these designs and they serve well to illustrate our point. All over the country living architecture is being created and we want to show more examples from other sections, we want the co-operation of architects everywhere to this end. It is a big country and the whole of it is the field of PENCIL POINTS.

We want letters on the subject of "Living Architecture," we want to print what men in different parts of this and other countries think about it. Won't you write us a letter giving your ideas?

PENCIL POINTS



Courtesy of The American Architect

Club House of the New York Yacht Club. Detail of Main Windows.
Warren & Wetmore, Architects, New York.

FEATURES OF OLD SHIPS AS ARCHITECTURAL DETAILS

BY FRANCIS S. SWALES

THE adaption of the form of a ship to building and the translation of suitable designs from wood into stone is very old. From the classic periods have come such examples as the rostral column, with the prows of galleys projecting one over the other from a vertical shaft, and the remnants of a prow, supposed to have formed one end of the Tiberian Isle.

In his early designs for the Maine Monument at New York, Mr. Magonigle adapted the galley to the lower part of the pylon in much the same manner as used on the rostral columns, but studied also the stern of the ship as a decoration of the rear of the monument, giving the effect of the ship stuck in the middle of the monument, or passing through it like a shell through an armor plate. In the working out of the final design he omitted the stern and lowered the prow so that it rests in the basin of water. This change in design makes the monument somewhat the same as the Isle of the Tiber, but forms only a façade decoration. Another, very much idealized and highly stilted example of the adaption of the galley to the sculptural treatment, was the Columbian Fountain, designed by Frederick MacMonnies, erected at the World's Fair at Chicago. In this instance the heavy architectural pedestal stands upon a high deck of a hull with too much free board. In spite of the breaking up of the mass of the pedestal by the screen of female galley slaves and of the triangulation, or bracing, that was effected by the buttress-like oars, the appearance was top-heavy and of being likely to "turn turtle." It was as unlike a ship as it was unlike architecture, but nevertheless the sculptor's ship was an object of chief enjoyment to many visitors to the exposition.

Mr. René Patouillard's splendid "restoration" of the Island in the Tiber at Rome goes to show, or suggest, that the whole island may have been archi-

tecturally and monumentally treated to convey the effect of a ship of gigantic dimensions carrying a whole group of important buildings, plazas, etc. A design similar to the Tiberian Island on a comparatively small scale was undertaken over half a century ago by the Empress Hsi Tai-hou of China.

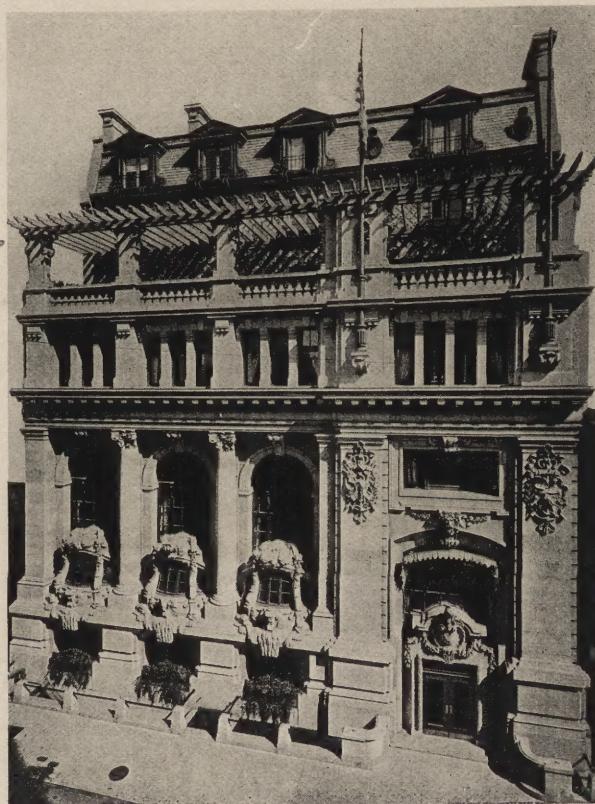
"The Old Buddah" as she was known, used fifty million dollars, that the Chinese government had voted to be used for the navy, with which to build herself a country palace on the border of a lake among the hills to the west of Peking. As that appropriation began to dwindle, her conscience is said to have troubled her and she is alleged to have said, "They wanted a navy, all right, they shall have a boat," and ordered the imperial architects to design one of white marble which would appear to float among the lotus in the lake. The boat was to be practical as well as ornamental. Therefore, a magnificent marble pavilion was built upon the deck where the Empress might on occasions have her luncheon aboard.

In Brussels on the west side of the Grande

Place is a tall narrow building built by the Skippers' Guild about 1685—one of the most picturesque of the several beautiful and interesting guild halls surrounding this wonderful civic center. Here, instead of standing the buildings on the deck of the ship, the ship has been placed on top of the building, or at least the stern of a ship, with four cannon projecting from ports adapted so as to form the gable of the building and suggest a ship sailing away over the roof. Several of the designs by Puget, such as "Le Soleil Royal," would seem to offer suggestions of great interest, easily adaptable to such features, more particularly for such buildings as the clubs or associations of nautical men.

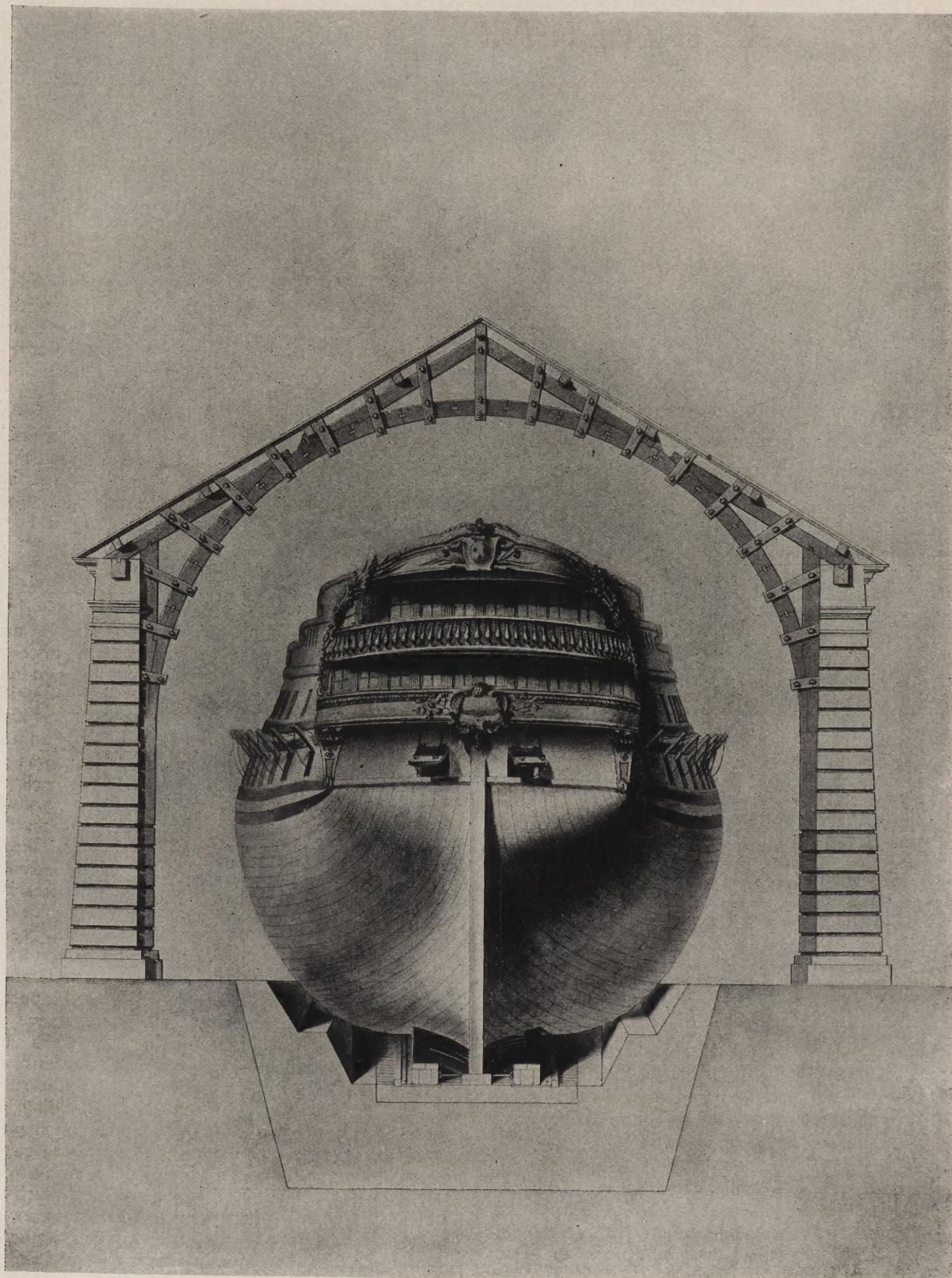
The value of suggestion of such nature was recognized a quarter of a century ago, by Mr. Whitney Warren in his splendid design for the New York

(Continued on Page 90)



*The New York Yacht Club,
Warren & Wetmore, Architects, New York.*

PENCIL POINTS



Drawing of an 18th Century French Ship Reproduced from an Unpublished Original Drawing in the Collection of Mr. Whitney Warren.

PENCIL POINTS



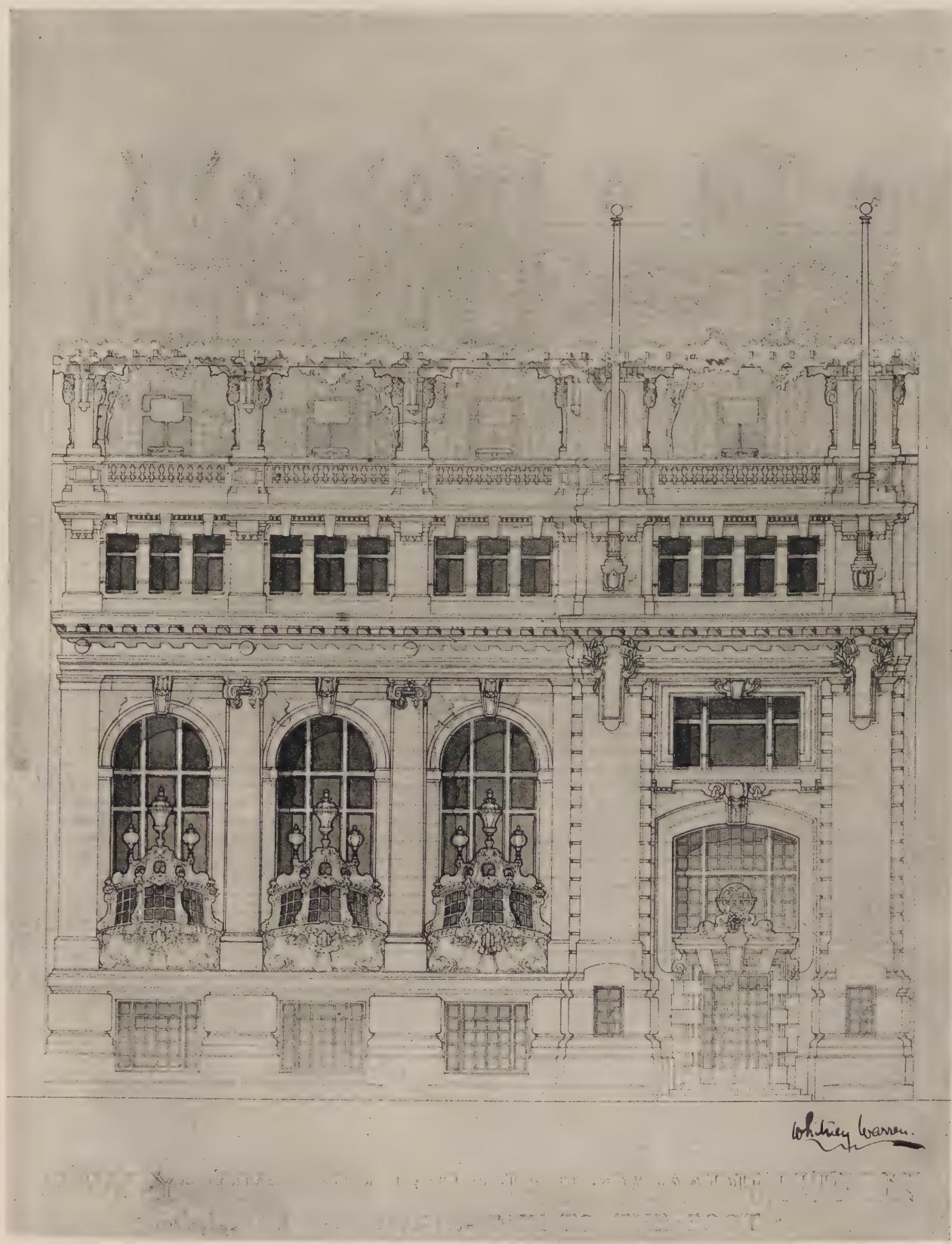
*Design for The National Maine Monument. Attilio Piccirilli, Sculptor.
H. Van Buren Magonigle, Architect.*

PENCIL POINTS



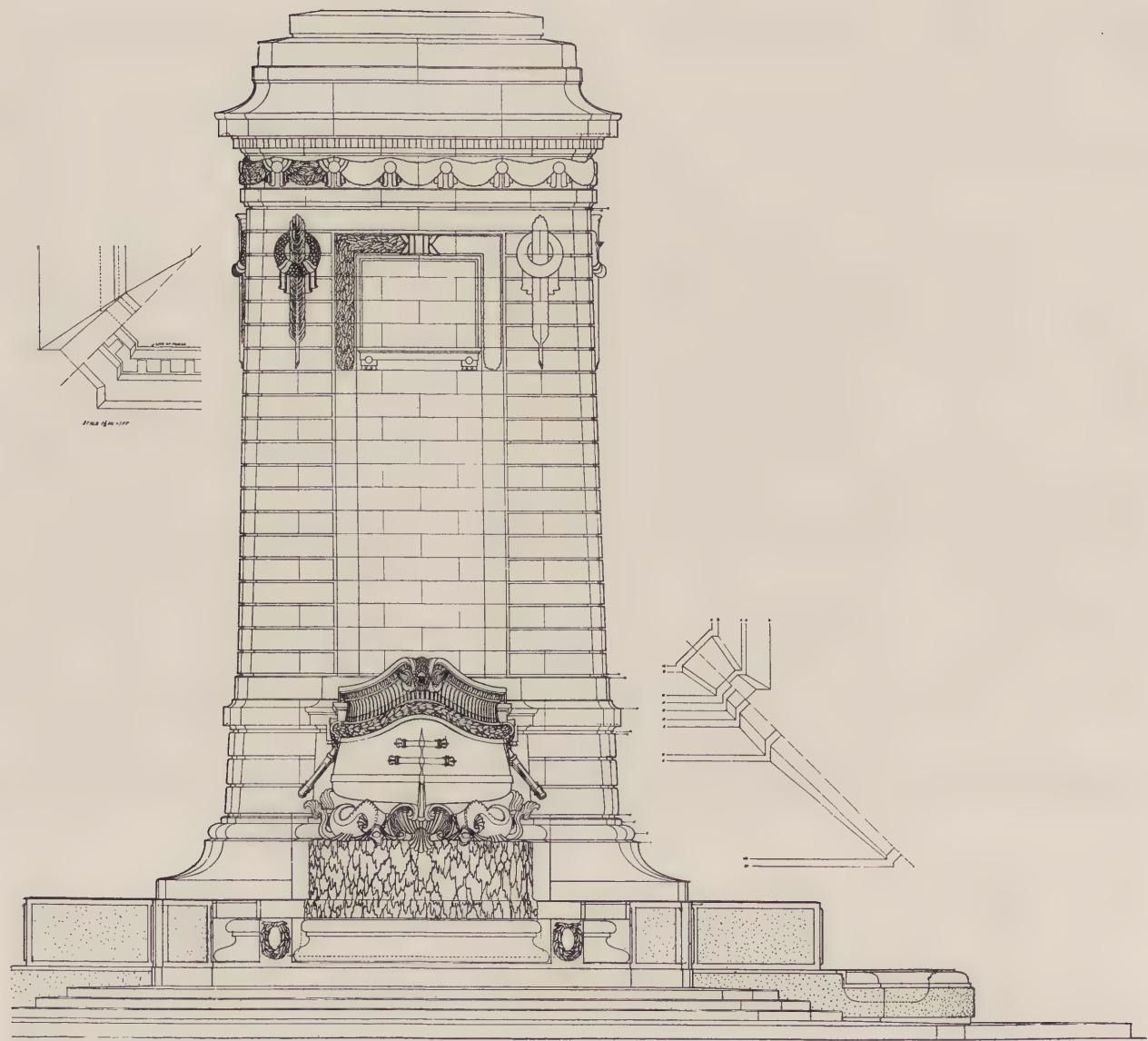
The Columbian Fountain Designed by Frederick MacMonnies and Erected at the World's Fair at Chicago..

PENCIL POINTS



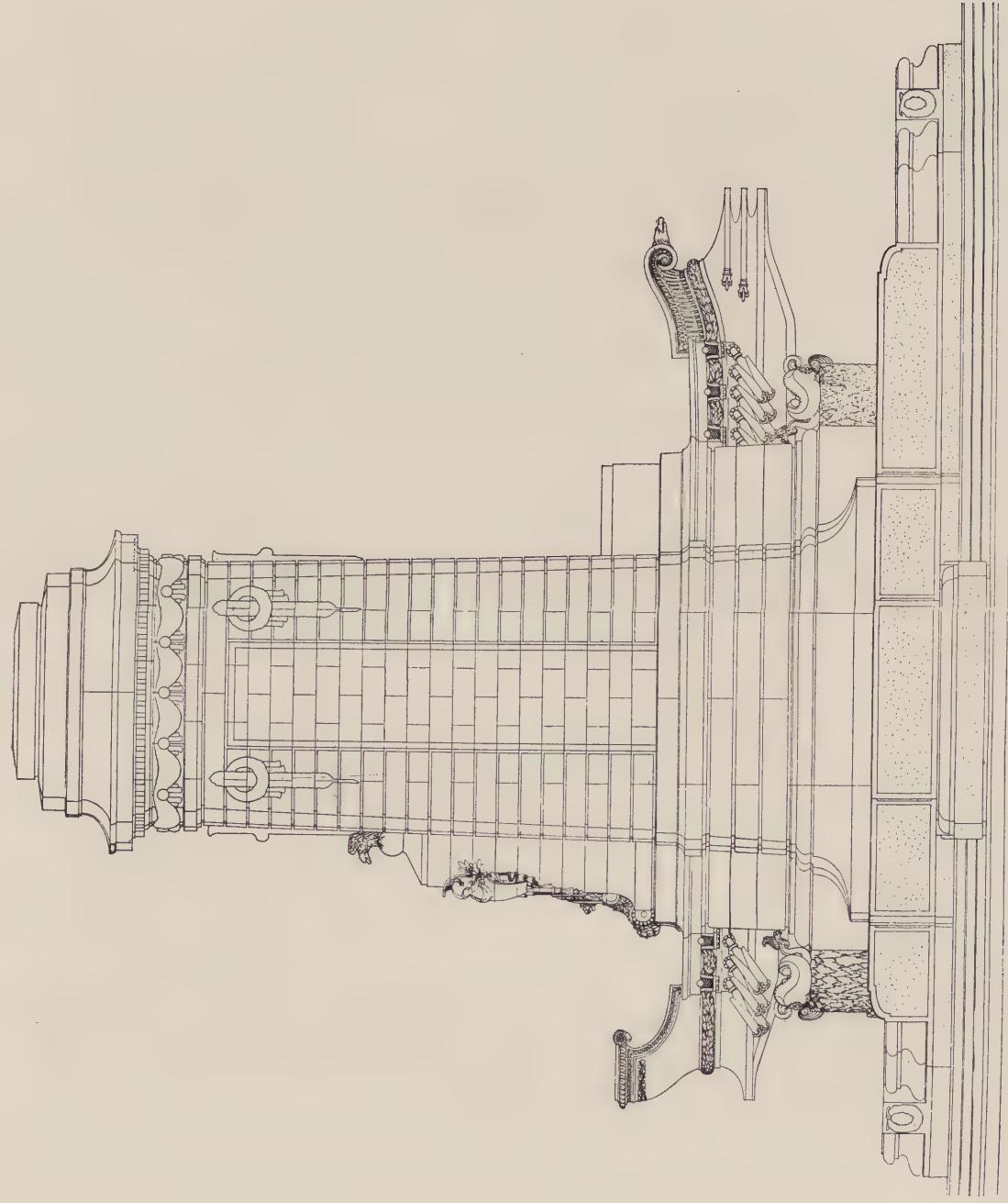
Design by Whitney Warren for the New York Yacht Club Competition.

PENCIL POINTS



Courtesy of Albert Kelsey

Front Elevation—Accepted Design for the National Maine Monument.
H. Van Buren Magonigle, Architect.



Courtesy of Albert Kelsey

Side Elevation—Accepted Design for the National Maine Monument. H. Van Buren Magonigle, Architect.

PENCIL POINTS



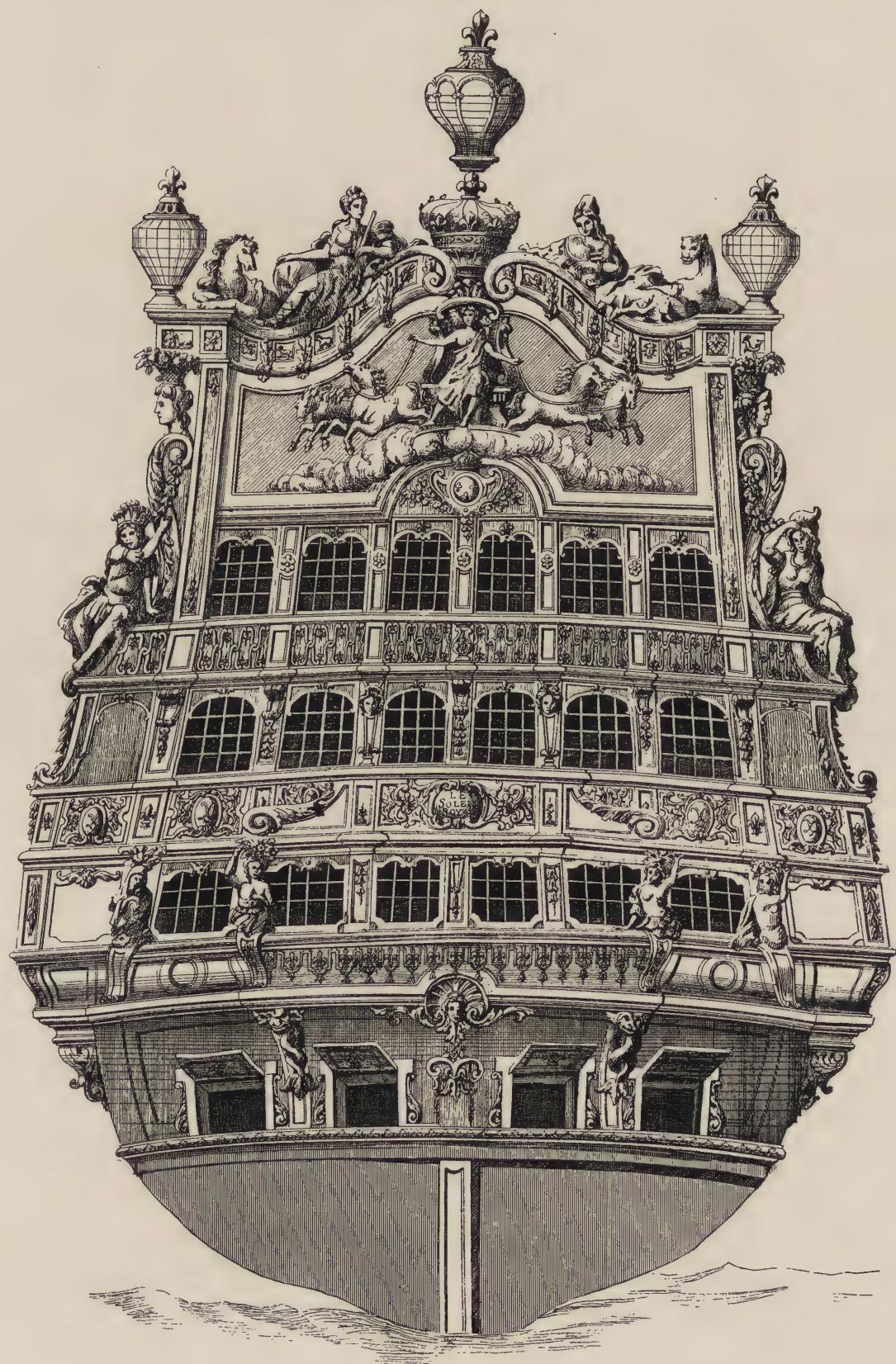
Copyright Curtis Publishing Co.,
Courtesy of The Ladies Home Journal.

*Present-Day Appearance of the Marble Boat Built
for the Chinese Empress, Hsi Tai-hou.*



Place de l'Hôtel-de-Ville, Brussels.

PENCIL POINTS



The Stern of "Le Soleil Royal," Period of Louis XIV, After a Design by Puget.

René Patouillard's Restoration of the Tiberian Island.





*René Patouillard's Restoration of the Tiberian Island, Central Portion.
From D'Espouy's "Monuments Antiques."*

René Patouillard's Restoration of the Tiberian Island, Right-hand Section.



PENCIL POINTS

VOL. VI, No. 1

PLATE I



COLOR DRAWING BY JULES GUERIN
ALAMO MISSION, SAN ANTONIO, TEXAS

On the other side of this sheet is reproduced at reduced size one of the series of very fine drawings by Jules Guerin which have just been published in colors in portfolio form. This and other drawings of the series first appeared in the "Ladies Home Journal," and attracted wide attention and appreciation. The plates in this portfolio are among the most interesting of the works of this distinguished artist and they afford a wealth of suggestions for the architect and draftsman who sketch as well as inspiring presentations of fine old works of architecture.

PENCIL POINTS

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PLATE II



Metropolitan Museum of Art.

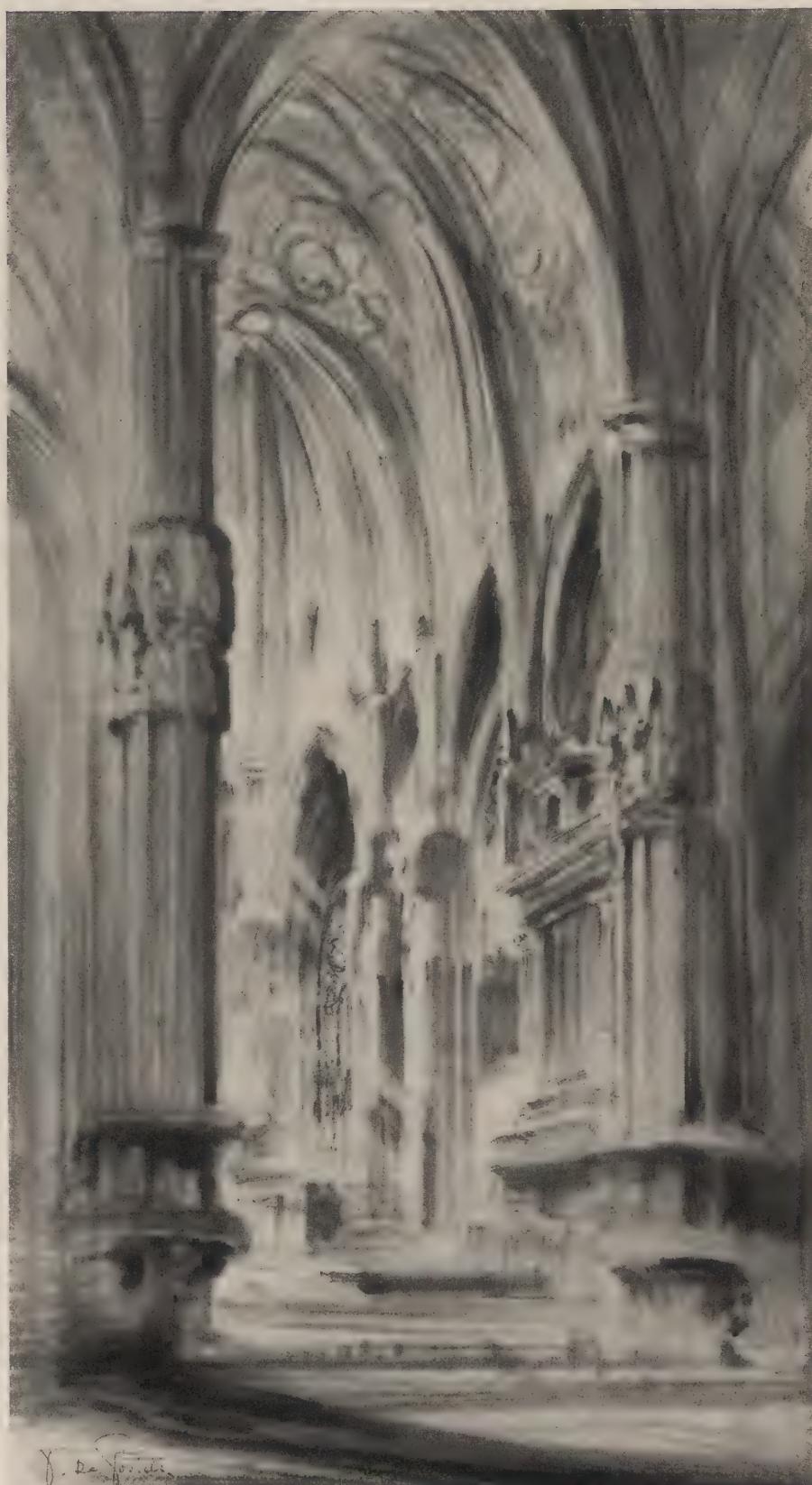
DIANA, EDWARD McCARTAN, SCULPTOR

From time to time we have been privileged to show in these pages works of sculpture by Edward McCartan, but of these none has been more worthy of admiration than his "Diana" shown on the other side of this sheet. It is a fresh, personal treatment of a subject that was a favorite one of the sculptors of classic times and while Mr. McCartan's statue is his own in every way it has the virtue of possessing the beauty, the excellence of composition and of execution of a classic work. This statue, we are informed, has been purchased for the Metropolitan Museum of Art, where it can now be seen.

PENCIL POINTS

VOL. VI, No. 1

PLATE III



STUMP DRAWING BY THEODORE de POSTELS
MILAN CATHEDRAL

An impression of the interior of Milan Cathedral that is wonderfully expressive of the spirit of the subject and is as well an example of masterly handling is reproduced on the other side of this sheet. Mr. De Postels' drawings in a wide range of mediums and methods, adopted to suit the character of his conception of the subject in each case, show a rare appreciation of architectural values and unusual skill in presentation. This particular drawing was made in crayon dust applied with the little rolls of paper known as "stumps," it is a remarkable study in the handling of tones.

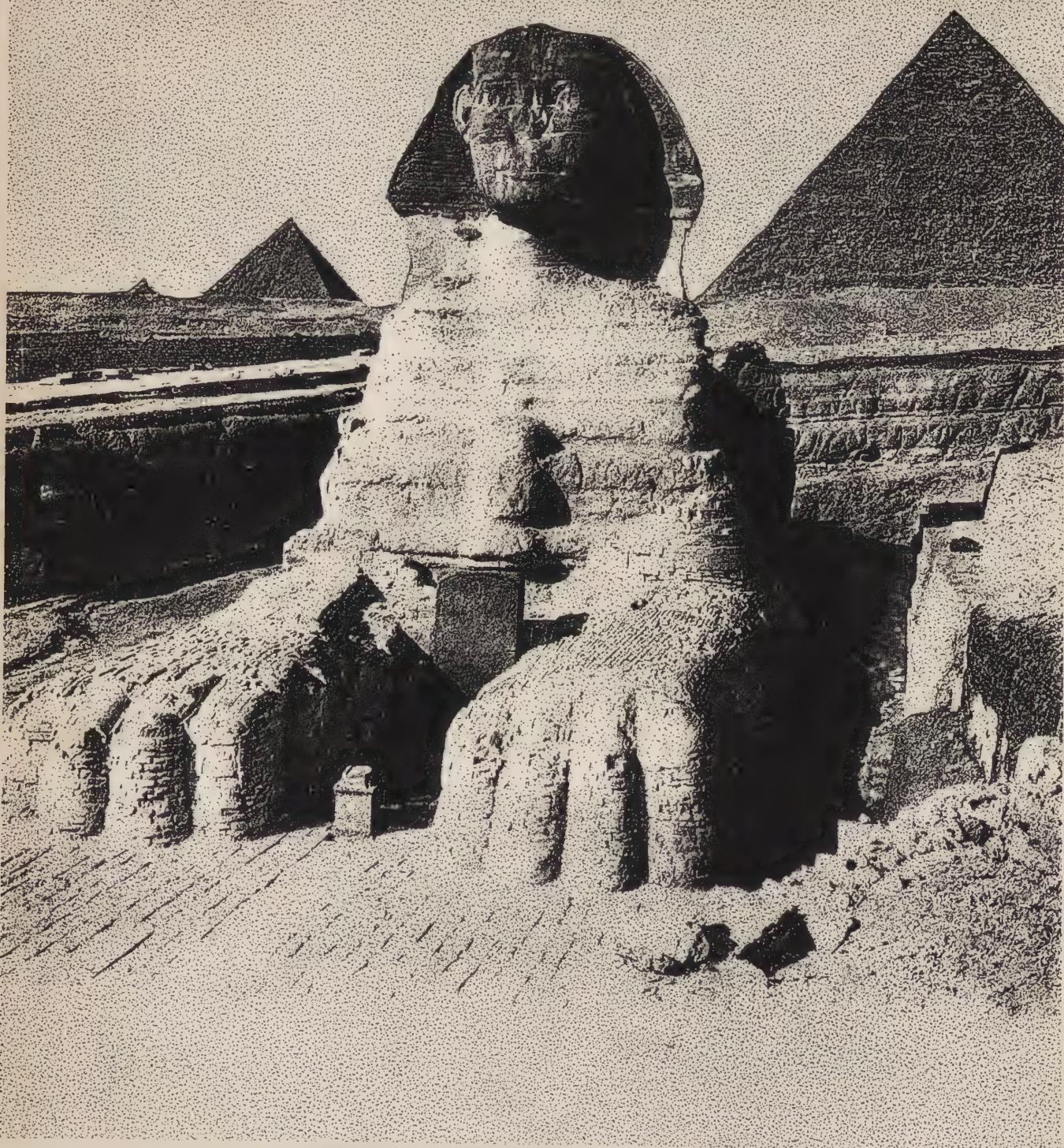
PENCIL POINTS

VOL. VI, No. 1

PLATE IV



LIFE DRAWING BY GEORGE BELLOWS



George Bellows' work always strikes a note that is different and individual and this is just as true of his studies from life in lithographic pencil as it is of his painting. A comparison of the drawing reproduced on the other side of this page with the life studies by Kenyon Cox published from time to time in *Pencil Points* during the past two years is especially interesting, the one representing the new tendencies and the others exemplifying the manner of one of the greatest masters of life drawing of the last generation. This illustration was made from a lithograph of a drawing by Mr. Bellows, pulled from the stone by Bolton Brown.

MASTER DRAFTSMEN, IX

WELLES BOSWORTH

WELLES BOSWORTH entered the Massachusetts Institute of Technology at the early age of sixteen as a member of the class of 1889 and upon completing his course at "The Tech" entered the office of Shepley, Rutan and Coolidge of Boston, and later took up landscape work under Frederick Law Olmsted upon the development of the grounds of Leland Stanford Jr. University. He then travelled in Europe in company with William Rotch Ware, who during many years was Editor of the *American Architect* when that journal was published at Boston. A special feature of the *American Architect* of that time was the publication of large plates of excellent pen drawings of architectural subjects, sketches, rendered perspectives of projected work, and drawings from photographs of subjects of architectural history. One of the early drawings reproduced was a view of the Rue du Chateau Josselin, by Mr. Bosworth, a drawing made when he was only twenty years old. The writer had just begun to try his own hand at architectural drawing when Mr. Bosworth's drawing was published. An effort to trace the plate demonstrated that it couldn't be done, and that Bosworth was "some draftsman!" In the light of later information that the original drawing was, of course, larger than the reproduction, it continued to hold a peculiar interest on account of its composition and because of the selection of subject—an "insignificant," but picturesque street of "tumble-down buildings" possessing architectural qualities more rare and fascinating than the great chateau for which, almost alone, the town is noted. The human figures are "young" in drawing—some-

what "out of drawing"—as painters say—but not without life or "wooden Indian" as is characteristic of most young architect's attempts at such drawing. The general illumination of the street and the handling of the transparent shadows in the foreground indicated that Mr. Bosworth's

observation had gone far even at that early stage. A few years later another notable pen-drawing by Mr. Bosworth of The Sphinx appeared in the same magazine. It was an outstanding drawing in the fine series published over a period of several years when architectural drawing in pen-and-ink was at its zenith in the hands of American draftsmen. There seemed to be no limit to the patience and painstaking care of those men who drew regularly for the old *American Architect*: Gregg, Campbell, Halden and Morrill, and of others who, like Mr. Bosworth, contributed a drawing now and then, or entered a competition in pen-drawing of some set subject. "Courage" was the motto to induce the workman to go

through with a tread-mill experience in technique of line-making and line-sparing—for it is the leaving of little white lines between that calls most for all that the draftsman has of patience; and in Mr. Bosworth's drawing of The Sphinx courage was displayed that might make one of Piranesi's slaves envious. If the tedium of the work was felt, that feeling is not expressed—perhaps there were long halts between stretches of energetic work induced by fits of enthusiasm. Except for a rather wiry indication of the outline of the distant hills, the drawing is free, spirited and without cramp. The labor is not obvious at first sight, but closer study discloses that its maker studied it to the last line. Allow-



Portrait of Welles Bosworth by Caro del Vaille.

Portion of Pen Drawing by Welles Bosworth Reproduced at the Actual Size of the Original Drawing, The Sphinx.



PENCIL POINTS



Courtesy of *The American Architect*.

Pen Drawing by Welles Bosworth. *The Sphinx.*

PENCIL POINTS



Water Color Drawing by Welles Bosworth.

PENCIL POINTS



Pen Drawing by Welles Bosworth. Rue du Château Josselin.

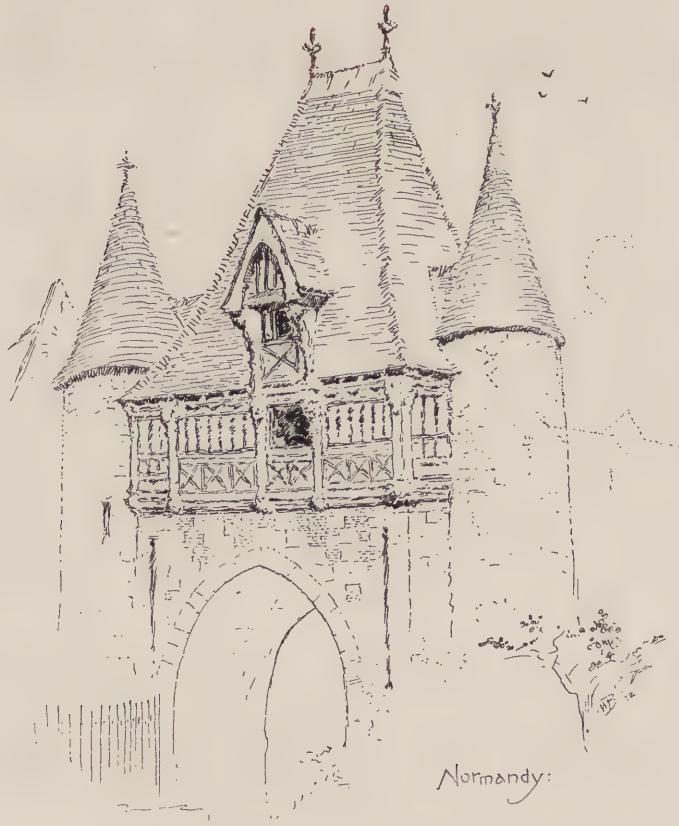
PENCIL POINTS

ing for the help of the photograph, there is a modelling and character given to the great monumental head that no photograph could ever give it; and the sunlight on the rugged remains of the torso is as the pair of human eyes perceive it rather than as the product of the monocular camera discloses.

After those early drawings few of his works have appeared in which draftsmanship has been the leading consideration. During the early nineties he commenced practice as an architect, designing among other things a group of buildings for the Hampton Normal and Agricultural Institute and some cottages on Long Island. A desire to take up subjects of more monumental character led him to go first to London to study under the painter Alma Tadema; and then to Paris, under Rédon and Chaussemiche at the *Ecole*. He spent some time travelling in Europe and then returned to New York and entered the office of Carrére and Hastings, worked upon the plan of the Pan-American Exposition at Buffalo and went to that city as resident architect in charge of the general design. And it was a designer (as we have grown to call the actual architect, as distinguished from the business-getter!) that Mr. Bosworth became known there. He did not cease to draw, nor to make drawings of a beautiful kind,

but it was because of the broad, simple treatment which he gave to some of the smaller buildings, causing them to be noted as things pleasing among a great deal of over-ornamented work, that attention to his work, since then, has been directed to the design, or the completed buildings.

After his work at Buffalo he was associated on the study of the Cleveland Group Plan and the excellent finished drawings of the original scholarly designs are his work. His mastery of draftsmanship and rendering was shown in the drawings which he made in association with Messrs. Cram, Goodhue and Ferguson for the competitive and winning design for West Point Military Academy. But the finest of all are to be found in his unfinished and very broad rough sketches which he makes with the side of a piece of charcoal and with the most cavalier disregard of the surface or background on which he works. They are made for the purpose of conveying his ideas to the client or the able young artists he has gathered about him to whom he can safely leave the study of representation of his ideas. Few of such drawings survive more than a few days' use. They are either translated into finished drawings by somebody else or are destroyed by using them while making the working drawings.



Normandy:

Pen Drawing by Welles Bosworth, Normandy

THE PENCIL POINTS SKETCH COMPETITION FOR 1924

THE Jury of award for the Pencil Points Sketch Competition for 1924 met in New York, December 8 and awarded the prizes as stated in detail in the report of the jury printed herewith. There were hundreds of sketches from all parts of the United States and Canada and some from foreign countries as well. They were in every commonly-used medium: pencil, crayon, water color, pen-and-ink, oil and in combinations of mediums. While pencil sketches predominated there was a much higher percentage of water color sketches than has been submitted in former years, and there were few pen-and-ink drawings. In general there was evident an ambition to sketch elaborate and imposing subjects often beyond the skill of the aspirant to render successfully, though in some cases the subjects chosen afforded too little opportunity for the display of an ability to sketch. In many cases there was evidence of a great effort to draw the detail accompanied by a lack of proper drawing of the masses, of seriously inaccurate perspective and incorrect drawing of the main forms. Too much dependence was frequently placed on linear perspective to make the drawing legible, the differentiation of planes and the suggestion of distance by strength of line or tone being either not understood or neglected. In short, the need of most of the entrants was to learn to simplify the representation of complex subjects, to observe and draw perspective more accurately and to learn to use lines of different strength and tones of different weight with an appreciation of their power to make or mar the impression of truth that a sketch gives the observer. Only a few entrants submitted sketches that did not conform to the requirement of the program of the competition that the subject must

be architectural in the sense that architecture must predominate. On the whole, the response was large but the number of entries that were of interest was comparatively small, so small, indeed, that it has been decided not to hold an exhibition of sketches selected from among those submitted, as was done in former years, and there will, consequently, be no travelling exhibition of sketches this year. It is hoped that those who entered this year will come into the competition which we expect to hold next fall and that, in the light of the criticism given above, a marked improvement in the general quality of sketches submitted will be evident.

Report of the Jury of Award

THE Jury of Award for the Pencil Points Sketch Competition for 1924 met on December 8, 1924 and made the following awards: First Prize of One Hundred Dollars to Esther Silber, St. Louis, Mo.; Second Prize of Fifty Dollars to Meade A. Spencer, New York City; Third Prize of Twenty-five Dollars to W. J. Perkins, Pittsburgh, Pa.; Fourth Prize of Fifteen Dollars to R. Alex. Willson and the Six Prizes of Ten Dollars each to: Constantin A. Pertzoff, Cambridge, Mass.; Albert Kruse, Philadelphia, Pa.; Rudolph Nedved, Chicago, Ill.; Ernest Born, San Francisco, Cal.; W. E. Willner, Philadelphia, Pa.; Ralph Coolidge Henry, Newton, Mass.

The Jury found it difficult to determine the proper placing of the first four prizes, as the best four entries seemed to be of nearly equal merit, each in its own way, and they were so different in character as to afford no basis for easy comparison.

The Jury commends the entrants for the spirit shown in competing and expresses the hope that those who submitted work may find much pleasure and development in sketching during the coming year.

(Signed)

John Mead Howells,
Chairman.

The Jury of Award consisted of the following: Harvey W. Corbett, Raymond Hood, Julian Clarence Levi, John Mead Howells, Eugene Clute. Mr. Howells was chosen chairman.

The large number of entries in this competition indicates a keen interest in sketching and the wide geographical distribution of the prizes indicates clearly that the best

sketches are not made in any one particular city or section of the country. It will be noted that the prizes went to St. Louis, New York and Pittsburgh. The fact that Pittsburgh men carried off two of the prizes is undoubtedly the result of the special activity in sketching that has been evident for the past few years, for this has tended naturally to develop a group of able sketchers. It is not difficult to arouse local interest in sketching and to organize a sketch club or a sketch group in an existing club. Men who are competent to lead the class can be found among the architects and more experienced draftsmen and local exhibitions can be held. This is one of the most pleasurable and worth-while activities for architectural men and it is to be hoped that more sketch groups will be formed all over the country.

PENCIL POINTS



Pencil Drawing by Esther Silber, St. Louis, Mo. Winner of the First Prize in the Pencil Points Sketch Competition for 1924.

PENCIL POINTS



Pencil Sketch by Meade A. Spencer, New York. Winner of the Second Prize in the Pencil Points Sketch Competition for 1924.

PENCIL POINTS

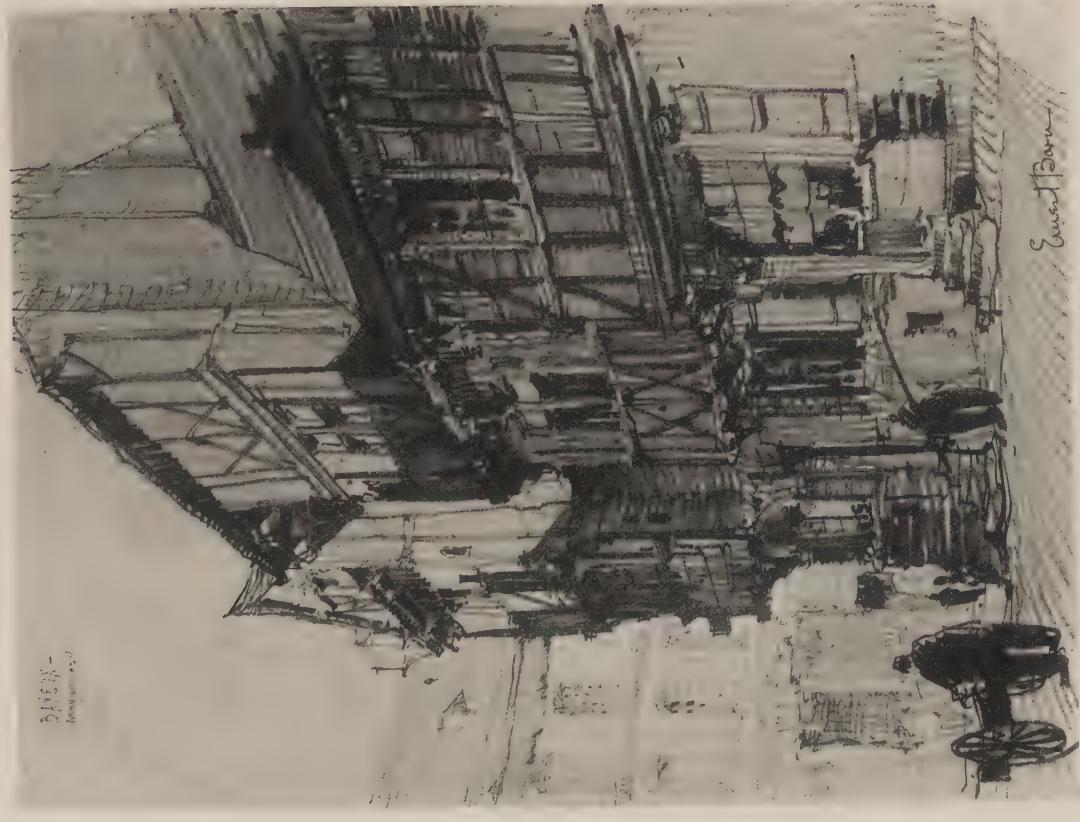


*Water Color by W. J. Perkins, Winner of the Third Prize in the Pencil Points Sketch Competition
for 1924.*

PENCIL POINTS



Pencil Sketch by R. Alex. Willson, Winner of the Fourth Prize in the Pencil Points Sketch Competition for 1924.



Sketch by Ernest Born.



Water Color Sketch by Rudolph Nedved.
Prize Winners of the Fifth Grade.

PENCIL POINTS



Water Color Sketch by W. E. Willner.

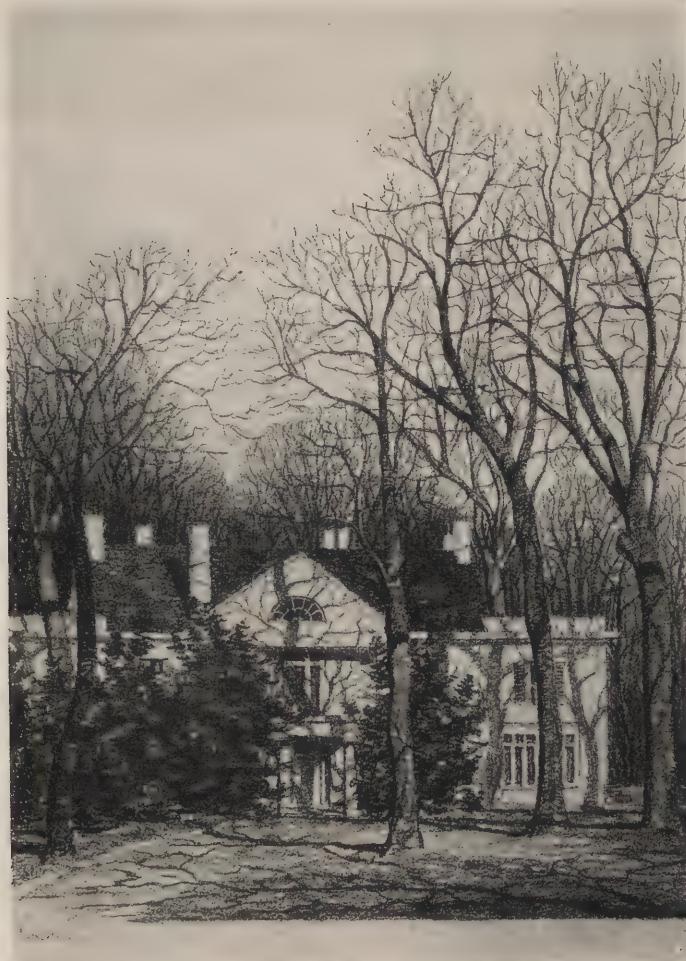


*Pencil Sketch by Ralph Coolidge Henry
Prize Winners of the Fifth Grade.*

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Pencil Sketch by Constantin A. Pertsoff.



*Pencil Sketch by Albert Kruse.
Prize Winners of the Fifth Grade.*

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items: "The present registration is as follows:

S. F. A.	Men	FELLOWS		VISITORS		Visit.	Students	TOTALS	
		Men	Women	Men	Women			Men	Women
S. F. A.	Men	13	—	1	—	13	—	27	—
	Men	—	—	2	—	2	—	4	—
S. C. S.	Men	—	—	—	—	—	—	—	19
	Women	—	3	—	1	—	11	—	15
TOTALS	Men	—	—	3	—	15	—	31	—
	Women	—	—	—	1	—	11	—	15
									46

"I am pleased to report that the German Institute has opened its doors for Scholars for the first time since the war. They are occupying new quarters. A considerable sum of money has been guaranteed them for the purchase of periodicals issued while the Institute was closed. There is a valuable working library. The new Director, Professor Amelung, proposes to resume many of the former activities, including open meetings at which scholars of different nations will be asked to speak.

"Manship came to Rome for a few days to see how the marble cutter had copied his models for the Ward-Thrasher Memorial. He was satisfied with the work except for a few minor details. We are now beginning to think of an unveiling. The Ambassador, Mr. Fletcher, will be here in a week or two, and I am going to see if he will not be present. It would be an opportunity to present the staff and Fellows to him.

"It will interest you to know that the Italians are to have a six-weeks summer school for American Musicians. The Italian Government has agreed to let the Villa d'Este at Tivoli be used for the new school, and the municipal theatre at Tivoli is likewise to be turned over for operatic reproductions.

"Former Fellow in Architecture, Mr. Phil Shutze is in Rome. The magnetic force of Rome is as strong as ever."

And from a letter from Tenney Frank, Professor in Charge, School of Classical Studies, the following:

"Our program of out-door work has now been completed. Though it included nine full-day excursions and fifteen morning lectures only one postponement was necessitated

by unfavorable weather. At present Professor Merrill is giving three weekly sessions to Martial and Professor Van Buren is lecturing one morning the week on sculpture.

"Thanks to liberal gifts from America the German Institute finally opened its library this month. Since its collection is more than three times as large as our Classical library, we shall again be frequent visitors there though it is now at the opposite end of the city. In order to fill some of our own pressing needs Professor Merrill has suggested that we appeal to University libraries for duplicates that they may possibly have acquired by legacies or purchases in bulk. His proposal met with our most hearty approval and we are hoping for a generous response to his letter which we have sent to the members of the Advisory committee.

"Interesting excavations are under way to which we are being admitted with more than reasonable courtesy. In the Augustan Forum the ancient pavement will soon be reached. The work is to be completed this winter and thrown open to the public in the presence of the King on "Rome's 2678th birthday" (April 21, 1925). At Ostia Director Calza has at last found the marine gate, which proves to be in excellent state of preservation. At Cervetri Mengarelli has, after a period of several years, begun excavations again with the aid of funds derived from America. Beneath San Sebastiano interesting rooms of great historical value are being found behind the tombs disclosed three years ago. Professor Majuri has now been placed in charge of the Scavi at Pompeii, an appointment which will doubtless ensure not only vigorous prosecution of the work, but also scientific observation, effective and timely publication of finds and a liberal policy toward scholars who wish to study there.

"Our publications are making commendable progress. Volume III of the *Monographs* was distributed last month. Dr. Bryan's solid monograph, Vol. IV, has passed through the page proof. For the fifth volume of the *Memoirs* the material is at hand. Professor Curtis' very valuable article on the Barberini collections, which will constitute at least half the volume, will go to press at once. We feel highly gratified that the State authorities were willing to entrust this important collection to an American scholar."

COMPETITIONS FOR AMERICAN ACADEMY IN ROME FELLOWSHIPS

THE American Academy in Rome has announced its annual competitions for Fellowships in architecture, painting, sculpture, musical composition and classical studies. The Fellowships will be awarded after competitions, which, in the case of the fine arts, are open to unmarried men who are citizens of the United States; in classical studies, to unmarried citizens, men or women. It should be particularly noted that in painting, sculpture and musical composition there is to be no formal competition involving the execution of work on prescribed subjects, but these Fellowships will be awarded by direct selection after a thorough investigation of the artistic ability and personal qualifications of the candidates. Applicants are requested to submit examples of their work and such other evidence as will assist the juries in making the selections.

For the Fellowship in painting, the stipend is provided by the Jacob H. Lazarus Fund of the Metropolitan Museum of Art, established by Mrs. Amelia B. Lazarus and Miss Emilie Lazarus. For each Fellowship in the fine arts, the stipend is \$1,000 a year for three years. In classical studies there is a Fellowship for one year with a stipend of \$1,000 and a Fellowship paying \$1,000 a year for two years. All Fellows have opportunity for travel, and Fellows in musical composition, of whom an extra amount of travel is required, in visiting the leading musical centers of Europe, receive an additional allowance of \$1,000 a year for traveling expenses. In the case of all Fellowships, residence and studio (or study) are provided free of charge at the Academy.

Entries will be received until March first. For circulars of information and application blanks, address Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York City.

PENCIL POINTS

PERSONALS

GEORGE F. SPINTI, JR., has been appointed instructor in design and construction in Architecture at the University of Wisconsin, Extension Division.

JOHN S. VAN WART AND ALFRED C. WEIN have become associated for the general practice of architecture with offices at 347 Madison Avenue, New York.

RUDOLPH LUDWIG, ARCHITECT, has removed his office to 242 West 56th Street, New York.

SAMUEL W. CARRINGTON, ARCHITECT, has removed his offices to 223A Western Indemnity Bldg., Dallas, Texas.

EDGAR V. SEELER, ARCHITECT, has removed his offices to the Franklin National Bank Building, 1416 Chestnut Street —1417 Sansom Street, Philadelphia, Pa.

WILLIAM MELLEMA has opened an office for the practice of architecture and engineering at 1017-18, Central Building, Los Angeles, Cal.

OTTO H. NEHER, ARCHITECT, has removed his offices to 1110-1112 Insurance Exchange Bldg., Los Angeles, Cal.

STANLEY & SCHEIBEL, ARCHITECTS, have removed their offices to 1301-6 Realty Building, Youngstown, Ohio.

N. W. JOHNSON, C. W. SCOVILLE and N. W. NOEHNING have opened an office for the practice of architecture under the firm name, Associated Architects, Stern Building, P. O. Box 753, Albuquerque, New Mexico.

HOWARD LELAND SMITH, ARCHITECT, has removed his offices to 19 West 44th St., New York.

HAMME & WITMAN, ARCHITECTS, York, Pa., have dissolved partnership. G. Frank Witman has entered into a co-partnership with James A. Royer under the firm name of Witman & Royer, with offices at 47 East Market St., York, Pa.

UNIVERSITY OF LOUISVILLE

THE Architectural Class of the University of Louisville has recently organized under the name of the University Archi-Arts Society. The class has been carrying on its work silently but steadily for ten years. It has now organized for the purpose of boosting the study of Architecture in Louisville and putting before the public the work that has been done unnoticed in the past. The club started off with a roll of fifteen enthusiastic members from whom you will hear later. The officers of the club are: E. C. Lea, president; R. E. Schwab, vice-president; R. W. Hunn, Jr., secretary; R. G. Kirby, treasurer; and A. E. Drabnick, sergeant-at-arms.

MILWAUKEE ARCHITECTURAL CLUB

THE club is off to a good start and is making progress. It has at this writing 44 paid up members, with excellent prospects of increasing this number to 100 after the first of the year. The problem of finding permanent quarters has been a difficult one. Temporary quarters are at 130 Grand Ave., but the committee on quarters is hopeful of securing a permanent location within the week. Meetings have been held the second and fourth nights of each month since the club's organization a month or so ago. At the last regular meeting an amendment to the constitution was voted, changing the meeting nights to the second and fourth Tuesdays of each month.

It is the practice at each regular meeting to have present a speaker to talk on some subject in line with the draftsmen's work. At the meeting two weeks ago Mr. H. E. Garlock, of the Andres Stone & Marble Co., gave a very interesting and instructive talk on marble. At last night's meeting only routine business was transacted.

A class for Beaux-Arts work has been organized and meets each Saturday afternoon and three evenings during the week. This class is being conducted by Roger Kirchhoff, of Kirchhoff & Rose, architects.

The club held a dance in its temporary quarters Saturday evening, November 29, which was well attended and proved an enjoyable event. A group of the members are planning a New Year's Eve ball.



NICHOLAS GVOSEDEFF

NICHOLAS GVOSEDEFF, who recently came to America, was educated at the Imperial Academy of Arts in Petrograd, Russia. He graduated from the architectural school and worked in the Atelier of Prof. Louis Benois. During his academic training he was assistant to V. F. Svingnen, architect to the Imperial Russian Court. Mr. Gvosdeff was a collector of architectural books and his library contained some of the most interesting and precious documents in Russia which were completely confiscated by the Revolutionists. He is the architect of a number of interesting buildings in Constantinople and among them is a palace for Mr. Nestle, the chocolate manufacturer. Mr. Gvosdeff won the competition for the Grand Opera House in Constantinople. For the past year Mr. Gvosdeff has been in America studying our architecture and working as composition designer.

BOSTON ARCHITECTURAL CLUB

THE Boston Architectural Club in the 1924 Edition of "the BOOK" continues its policy of supplying to the profession a valuable book of elevations and details at a cost within the reach of all. We congratulate the B. A. C. upon the practical results already attained by this policy.

It may interest our readers to know that in the Club's "After-office-hours" classes for the season of 1924-25 over 100 students are enrolled and working nightly under competent instruction and criticism. The classes, after the first year, are doing problems in conjunction with "M. I. T." and Harvard Architectural Schools under the personal criticism of Prof. Hafner, of the Harvard School, and Prof. Carlu of "Tech," for which generous aid and cooperation the Club is indebted to these Schools. Twelve of the last nineteen "Rotch" men are the direct product of the Club Atelier.

CINCINNATI ARCHITECTURAL SOCIETY

THE Cincinnati Architectural Society has had its annual election and the new year has started with a rush; with John Deeken as President, Ed. Russack as Treasurer and John Baker as Secretary, the Society is assured of a most energetic administration. The heads of the various Committees are: Ed. Kruckemeyer, Educational; Earl Carlton, Library; Chuck Strong, Membership; Richard Grant, House; Sam Hannaford, Publicity.

PENCIL POINTS



THEODORE O. FRAENKEL

THEODORE O. FRAENKEL died recently at the Park Avenue Hotel, New York City, where he had made his home for the last nineteen years. Mr. Fraenkel was born in Chicago, and when he was still very young he studied wood carving. It was through this work that he became interested in architecture, outdoor sketching, designing and color. While associated with Mr. Burton in the firm of Fraenkel and Burton in New Orleans, Mr. Fraenkel designed the Yacht Club, for that city. He later went to St. Louis where he worked on the Exposition and then returned to Chicago. Here, while working for Mr. Charles H. Frost, he was engaged upon the State of Maine Building for the World's Fair. He came to New York in 1904 and made his home in this city until his death. Mr. Fraenkel's last work was in association with Arthur D. Pickering on the building now known as the Canadian Pacific Building. Mr. Fraenkel was very fond of outdoor sketching and made a good many water colors of homes in and around New York which he presented to The New York Historical Society. His passing on will be keenly felt by his many friends in the profession.

THOMAS M. NEWTON

THOMAS M. NEWTON, former Assistant State Architect, died from heart disease at his home, 82 West Twelfth Street. Mr. Newton was 56 years old, having been born in New York City in 1868. Following his graduation from Columbia University, he studied at the Ecole de Beaux Arts in Paris. Returning to America he became connected with the firm of Carrere & Hastings.

He continued here until the outbreak of the Spanish-American War, when he was appointed consulting engineer for the United States Army in Cuba. When the war ended he was appointed Assistant State Architect, but relinquished this position to become a Major in the Engineering Corps of the army when the World War began. He served until the armistice, during which time he received the Legion of Honor and was cited for distinguished service.

When he returned from France he resumed his work for the State, but resigned to enter the firm of Donn Barber.

HOLABIRD & ROCHE INTERDEPARTMENT BOWLING LEAGUE

UPON the completion of the first half of the schedule of the Interdepartment Bowling League organized for employees of the firm of Holabird and Roche, Architects, the members of the teams are congratulating themselves upon the unexpected great success. The high scores attained indicate the great enthusiasm for the game. Almost every member secured at least one two-hundred game for himself which is quite a feat for men who never heretofore participated in a league game.

It has been the ambition of the bowlers to stimulate interest in the game among the men of other architectural firms.

A picked team of Holabird and Roche men have engaged in a few exhibition games thus far and have been quite successful, having won four of these matches and lost two. If more offices were interested, the possibility of an Architect's Bowling League might be realized.

A list of the bowlers and their averages is given below, also the standing of the teams for the first half of the schedule.

If members of other architectural firms in or about Chicago are interested in scheduling games, we would be glad to arrange for same, write to A. Ziegele, c/o Holabird & Roche, Architects, 1400 Monroe Building, Chicago.

BOWLING

TEAM	WON	LOST	AVERAGE
ARCHITECTURAL	24	12	.666
MECHANICAL	24	12	.666
ELECTRICAL	17	19	.473
STRUCTURAL	7	29	.195

High Game—Reinhardt—220

Low Games—Rose, Green—99

GAMES

NAME	PLAYED	AVERAGE	HANDICAP
1. Schell	15	172.6	0
2. N. E. Beuter	36	169.3	1
3. Sid Anderson	12	161.2	5
4. A. Ziegele	36	159.0	6
5. C. H. Evans	36	154.7	9
6. L. Ziegele	33	149.9	11
7. Geo. Kandzie	36	149.0	11
8. G. A. Reinhardt	30	144.7	14
9. Chas. Frogner	36	144.2	14
10. D. W. Carlson	27	143.5	14
11. E. E. Elliott	36	143.5	14
12. V. O. McClurg	36	142.9	15
13. H. Preuss	36	138.1	17
14. S. Perrett	36	136.2	18
15. S. J. Chakow	36	135.3	18
16. Walter Conley	27	131.4	20
17. Art Rose	33	129.3	21
18. Schuman	24	126.7	23
19. W. J. Green	33	121.4	25
20. B. B. Shapiro	12	117.5	27
21. A. H. Brewer	30	114.9	29
22. Frogh	6	112.5	30

DETROIT ARCHITECTURAL BOWLING LEAGUE

SEASON OF 1924 AND 1925

Week of Nov. 21, 1924: Team Standings.

Name of Team	W	L	Per cent
1. Donaldson & Meier	24	6	.800
2. McGrath, Dohman & Page	22	8	.733
3. A. Kahn, Eng.	21	9	.700
4. A. Kahn, Arch.	19	11	.633
5. Herman & Simons	17	13	.567
6. Malcomson & Higginbotham	12	18	.400
7. Van Leyen & Shilling	11	19	.367
8. Smith, Hinchman & Grylls	10	20	.333
9. Jonke, Venman & Krecke	8	22	.267
10. Weston & Ellington	6	24	.200

High Scores: Miehls, 212; Kalshed, 216; Krecke, 209; Schoerger, 225; Roof, 216-222-205; Bossler, 213; French, 214; Lindeman, 243; F. McCormick, 209; Neal, 206; McGrath, 203; Hoffman, 220-223; Manning, 200.

PENCIL POINTS

ATELIER HIRONS TRAVELLING EXHIBITION

WE have received the following announcement from Richard Banks Thomas, Architect, 342 E. 41st St., New York.

"I am arranging an itinerary for a collection of Paris Prize drawings and sketches made in the Atelier Hirons during the past two years. This collection consists of the original drawings submitted in the Paris Prize competition in 1923 by myself, Rudolph deGhetto, and in the 1924 competition by Andrew F. Euston. This collection includes also a complete set of studies numbering about 200 drawings, made in preparation for my final drawings, and a large number of the studies from Mr. deGhetto's and Mr. Euston's.

"The fact that these three Paris Prizes were placed H. C. does not detract from the fact that they were among the best ones submitted in these two years, and should be of great value to the students, not only in seeing the final drawings, but also of the opportunity of looking over the preliminary sketches and studies. The Atelier is offering this opportunity to the schools throughout the country solely for the purpose of giving students a chance to see these drawings and studies, and without any recompense to itself. The only obligation you would be under would be to pay the express charges to the next stopping point, and we are trying to arrange the itinerary so that there will not be too great a distance between exhibitions."

DALLAS ARCHITECTURAL CLUB

ANOTHER Xmas has come about to end a very busy year for most of us and for the Dallas Architectural Club one that has seen the fulfillment of the hopes and desires of the club since its organization—our own club building.

It is just about finished and you can believe me when I say that we are very proud of it. It is attracting much attention and bids fair to be one of the most distinctive buildings in the city. We expect to have our opening early in January and I want to extend an invitation to you and to your associates to attend this house warming.

During the early part of February the three Texas State Chapters of the A. I. A. are going to have a joint meeting in our club building and at that time we are going to stage our annual comedy of errors. The playwright of the Club, Ralph Bryan, is at work on it now and before he gets it finished I am sure that he will have a conglomeration of nonsense and fun that will be a knockout.

We are going to try and have several exhibitions during the coming year and at this time I wish that you would see that we are put on the list to receive your sketch competition when it starts to travel. Our first exhibition will in all probability be one of a local nature showing purely the work of the local architects and draftsmen.

We wish you and yours and all other architectural clubs a very merry Xmas and a prosperous New Year.

LIFE DRAWING

A NUMBER of architectural clubs have classes in life drawing and there are a number of classes throughout the country that have been formed by small groups of men who appreciate the value of learning to draw from the figure under competent instruction. It is not difficult to add such a class to the program of a club and often it is possible to arrange with an artist for a moderate sum to instruct a small class in his own studio evenings.

The value to an architect of the ability to make his hand express what he wishes it to express by means of free hand drawing is clear and the way to acquire the necessary skill most rapidly and surely is through drawing from life and sketching out of doors, and this is the time of year for indoor study in the greater part of the country. If you have a life class won't you tell us about it? If you haven't, why not form one?



Interior of "The Mill," Greenwich Village, New York.
Painted Decorations by Victor Pedrotti.

THE PROBLEM OF THE RESTAURANT INTERIOR

SEEING an interesting drawing of a design for a restaurant interior that Edmund S. Campbell made for use with his students while he was head of the School of Architecture at Armour Institute, suggested the desirability of treating "The Problem of the Restaurant Interior" in these pages. Two interesting rooms of this kind are shown here-with and the idea has grown so that we expect to give further material on this subject in the next issue. Mr. Campbell has consented to the reproduction of his drawing. Winold Reiss has promised to dig up some of his original drawings for us and we expect to have detail photographs of his designs in the Alamac, both in the "Mediaeval Grill" and "The Congo Room." We have secured a photograph of the very interesting interior treatment designed and carried out by Lawrence Bottomley for the "Club Royal" and we hope to show his decorations in the new "Club Borgo." A newly decorated restaurant in the theatre district is announcing as a special attraction that the interior was created by one of the best known architects in the country and we expect to show his design.

In doing this we shall wherever possible show reproductions of drawings as of the chief interest to our readers, using photographs of the interiors and of details to show the relation of the details presented to the whole, and the appearance of the work when carried out. Some of the illustrations we are assembling are of work that is not recent, but is chosen because it illustrates the points we have in mind and contains suggestions to students and designers in attacking this problem. We shall make no effort in this article to publish "current architecture," as a matter of fact the "Club Royal" decorations were done several years ago and the place has been closed for some months, the decorations at the Alamac have been done long enough to have lost their "news" value, but this makes them none the less valuable for our purpose, which is to present some material, as varied as possible, that will be helpful in solving "The Problem of the Restaurant Interior."

PENCIL POINTS

A. I. A. TO OFFER PRIZES IN DESIGN COMPETITION TO BE ANNOUNCED SOON

A COMPETITION for a number of prizes for the best designs submitted in accordance with a program now in preparation will be announced soon by The American Institute of Architects and the program of the competition will be printed in the next issue of PENCIL POINTS. D. Everett Waid, President of the American Institute of Architects, is taking a keen personal interest in the proposed competition and the winning designs are to be shown at the Architectural Exposition in the Grand Central Palace, April 19 to May 5, 1925. This competition is one which is sure to be of the widest interest to draftsmen all over the country and we suggest that our readers watch for the publication of the program and complete conditions in our next issue and enter the competition. Entry, of course, is free and copies of the program may be had free upon application, when issued.

THE GROUNDS OF THE HOUSE

THE treatment of the grounds around the small house and the house of moderate size is a subject upon which a need for more illustrative material is felt, and for this reason there should be a welcome for "English House Grounds" a book of views of the grounds of places of moderate size selected with the thought of providing suggestions from English homes for the treatment of the landscape setting of the American home of moderate size. The introductory text is by Clarence Fowler, Fellow of the American Society of Landscape Architects, who has also supplied descriptive and critical captions of great value under the illustrations pointing out the best features of the grounds shown, indicating how the suggestions to be found in the pictures can be applied and in a number of cases giving the names of the plants to use in obtaining the effects shown. This book was conceived by the late Samuel Parsons, whose life work was so great an influence in moulding the development of landscape architecture in our country. The book was carried to completion by his daughter, who had long been associated with him in his practice. It is published by Mabel Parsons, 15 East 40th Street, New York City. \$7.50 postpaid. Size 9 in. x 12 in. Attractively bound in half-cloth.

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(*Other Items on Page 120*)

Wanted: Architectural draftsman with considerable experience in school and church work. Tudor and Gothic preferred. State experience and salary required. W. E. N. Hunter, Architect, 2457 Woodward Avenue, Detroit, Michigan.

MOVEMENT TO PRESERVE HISTORIC BILLLOPP HOUSE

A MOVEMENT has been started to preserve the historic Billlopp House on Staten Island, Borough of Richmond, New York City. A campaign to awaken public opinion in this matter has been begun by W. Lynn McCracken, chairman of the South Shore Protective Association Park Committee. In addition to the support of local organizations and residents of Staten Island Mr. McCracken has been assured by Dr. George Frederick Kuns, President of the American Scenic and Historical Society, of New York that the Society will lend its moral support to any practical movement for the preservation of the Billlopp House.

The preservation of houses that date from the early years of our country is a matter to which more attention might well be given, following the example of those communities that have already taken effective means to preserve the historic homes in their localities.

ENGLISH PRECEDENT FOR MODERN BRICKWORK

A VERY useful book for the architect and draftsman is "English Precedent for Modern Brickwork" containing photographic plates and measured drawings of English Tudor and Georgian brickwork with photographs and drawings of a number of examples of work in these styles by present-day American architects. There is also valuable text matter.

The illustrations have been chosen to point out the beauty and adaptability of Tudor and Georgian precedent and the aim in making the photograph was to picture the spirit of the old work, because it was the result of enthusiastic design and the best of brick craftsmanship.

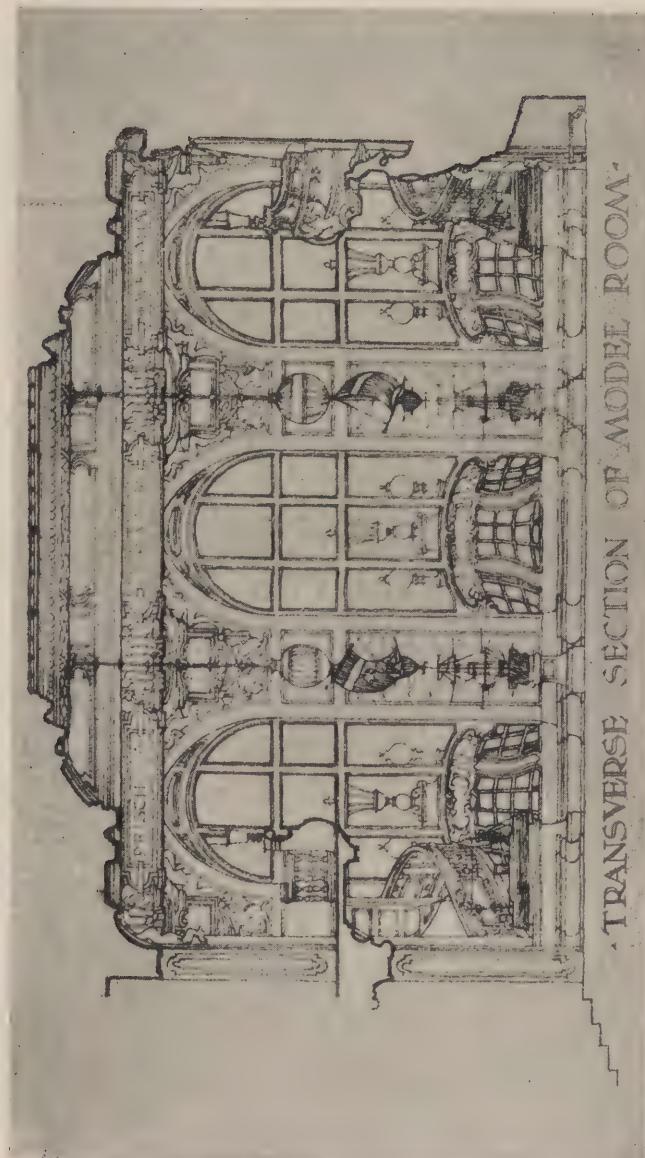
In making available for the use of the profession these photographs and drawings, those who have compiled this book have rendered a service, for everything that increases the architect's power of expression is a benefit, and brick work as used by the men who built the buildings shown in this book is a wonderfully expressive medium.

Adding to the interest and beauty of the book are two reproductions in color, one "An English Manor House and Garden" from a water color by Otto R. Eggers, which is used as a frontispiece, and a "Cut Brick Door Trim, Longbridge House, Farnham, Surrey," a color vignette which decorates the cover.

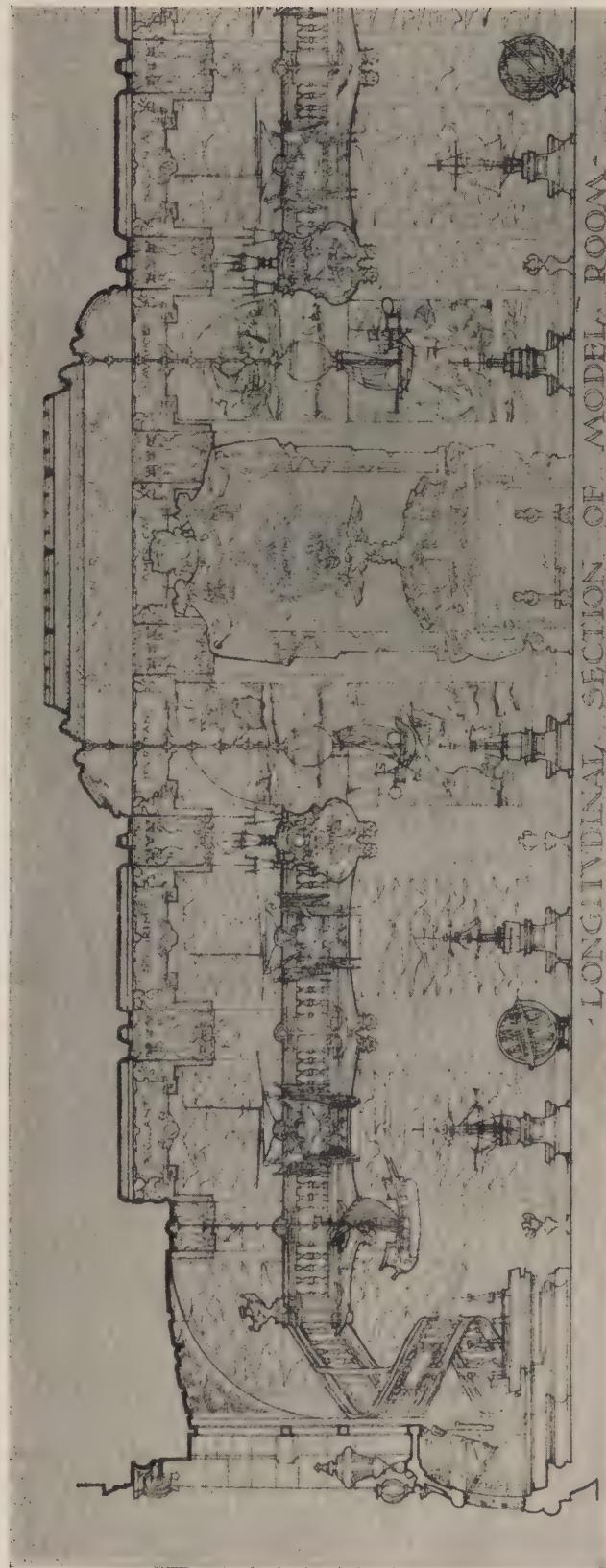
"English Precedent for Modern Brickwork" is published for The American Face Brick Association, Chicago. Price \$2.00, size 8½ in. x 11 in., 100 pages.



*The "Medieval Grill" in the Hotel Alamac, New York.
Decorations by Winold Reiss.*



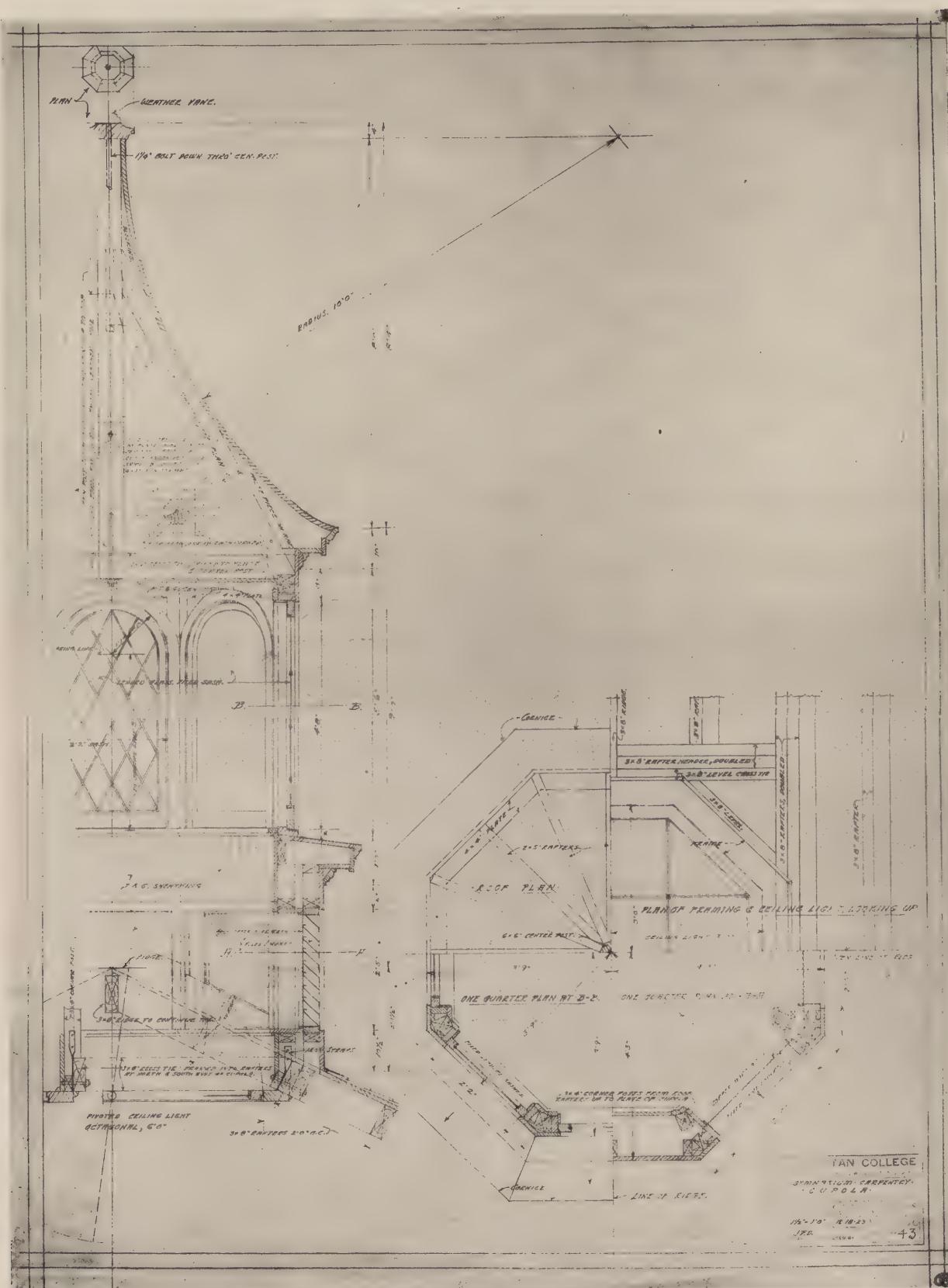
TRANSVERSE SECTION OF MODELL ROOM.



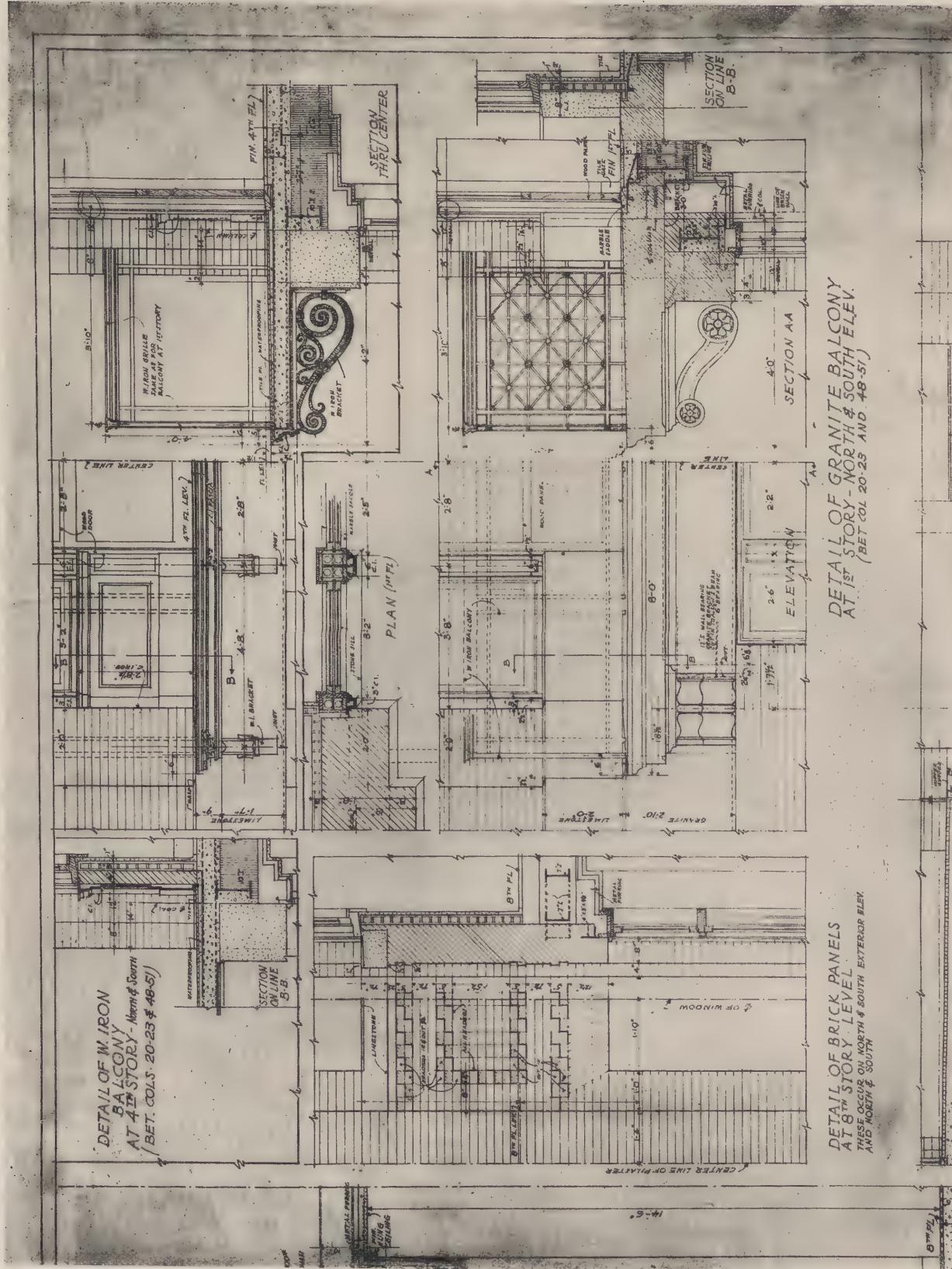
LONGITUDINAL SECTION OF MODELL ROOM.

*Accepted Design for the New York Yacht Club, Warren & Wetmore, Architects, New York.
(See text beginning on page 39.)*

PENCIL POINTS



*Details of Construction—Gymnasium Carpentry Cupola, Manhattan College. Jas. W. O'Connor,
Architect, Jas. F. Delany, Associate Architect.*

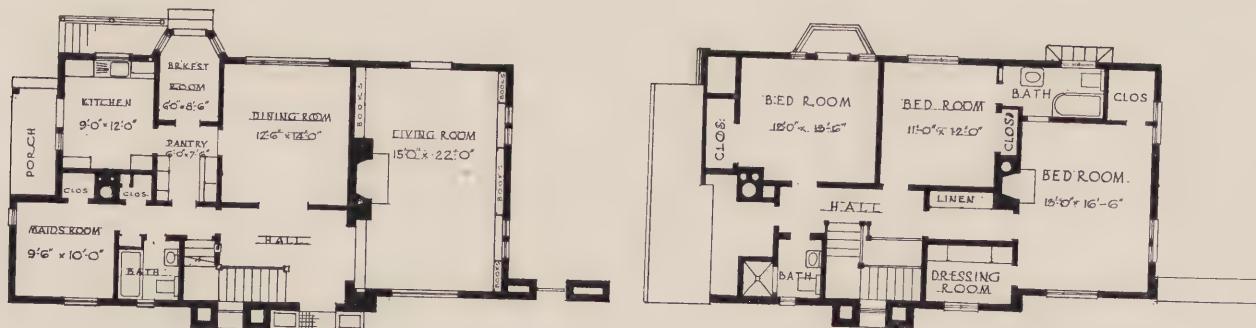


Details of Construction—New Bellcore Hospital, New York City. McKim, Mead & White, Architects, New York.

PENCIL POINTS



Rendering by J. Ivan Dise.



Residence for W. B. Bryant. Dise and Ditchy, Architects, Detroit.



THE heading for this department, reproduced above, was submitted by Stephen D'Amico, Jr., of New Orleans.

Messrs. R. W. Hubbel and R. E. Yates of the office of Albert Kahn, Detroit, win the little prize for the most interesting contribution to this department for December.

Come again Hubbel and Yates, we like your stuff!

The sketch published on page 92 of the November issue without credit we find was submitted by Mr. Louis E. Korn, of Los Angeles.

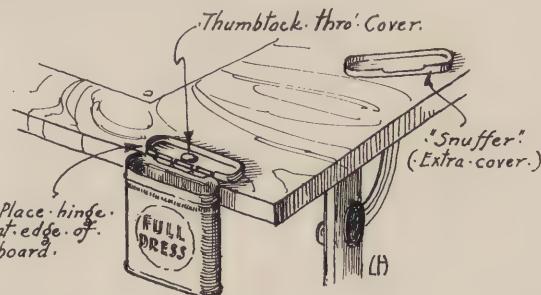
MR. R. Gordon L. Walker of Auckland, N. Z. broadcasts the following:

I see someone has forestalled me with the good old mixture for "Fixatif"—shellac and spirits. I have used it but don't get as good results for pencil as the following:

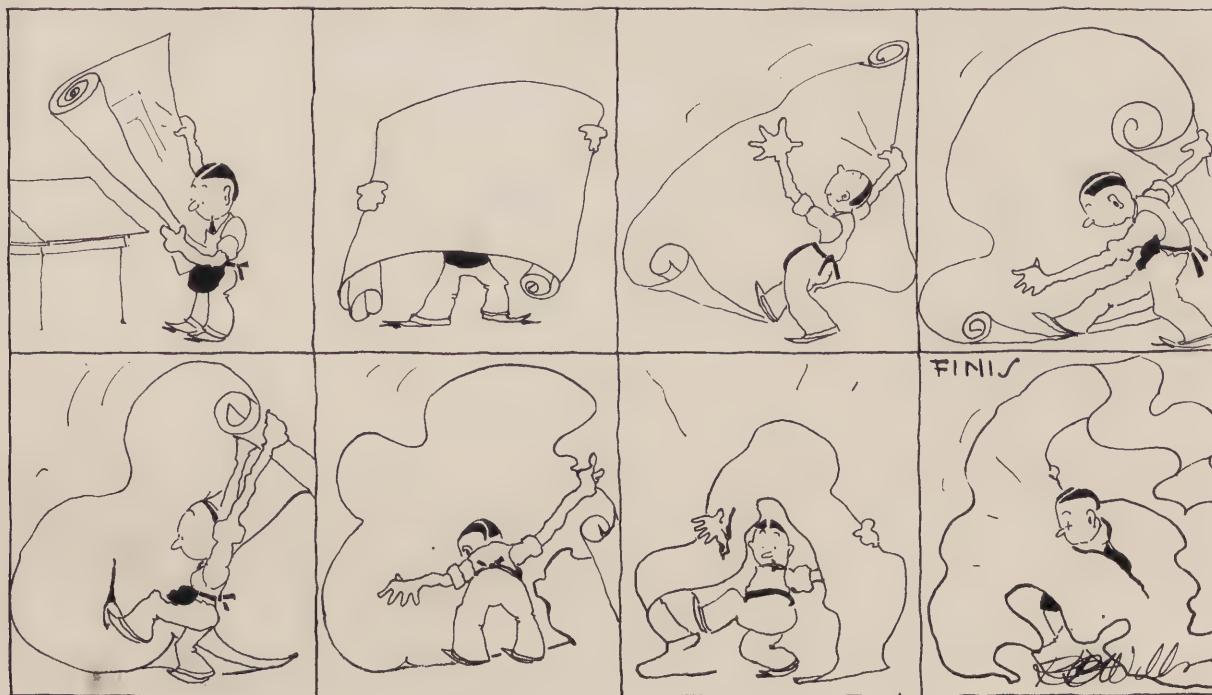
There was someone asking what fixatif is,
For pencil I've used quite a lot.
It's simple and cheap and quite easily got—
It's naught but some well watered milk.
Of fresh dairy cows' milk take one teaspoonful.
And water ten times that amount.
Mix well together—lay out your sketch flat,
And brush on like running a wash.
Don't let it dry flat or pools will soon form,
But hang by one corner to dry.

And if you want any praise for PENCIL POINTS, listen here. I wouldn't be without it and it has helped me both in office routine and in drafting room practice. I say—carry on with the good work and here's luck.

LORENZO HAMILTON of Meriden, Conn., has a grand little idea to make the smoker comfortable and, like the good architect he is, he submits complete drawings and specifications.



WHILE not strictly an architectural matter, this may interest some draftsmen (and perhaps even architects); if it merits publication in your "Here and There and This and That" column the undersigned will be greatly surprised and flattered. From the writer's observation and experience it appears that smoking is permitted in the majority of offices, large and small. The writer believes that this indirectly contributes to better design and makes for better feeling among the men than where strict rules are in order. Every smoker has at one time or another burned a hole in some favorite tracing, or scorched the edge of his board, or perhaps even had the edge of his best "45" triangle suddenly scalloped by the business end of a cigarette. The average ash-tray is not exactly at home on an architect's drafting board and some species have been known to slide off and sometimes even tip over and deposit a fine gray dust on the most important part of one's $\frac{3}{4}$ " detail. The accompanying sketch is self-explanatory,



The Office Boy and the F. S. D. done by R. B. Wills, Boston, Mass.

PENCIL POINTS

but before this matter goes to the Patent Office let me explain one or two subtle points: The method of attaching to the edge of the table permits the tray ("baccy" can) to always remain vertical, the hinge of the can taking care of changes in the angle of slant of the board; if the smoker prefers a pipe, the can cover tacked to the board makes an excellent place to stand a round-bottomed pipe; it would be well to add that the cover of an additional can should be kept handy for use as a "snuffer," for a live butt in the open can will occasionally set up a disagreeable smudge among the other dead soldiers and burnt matches at the bottom. I need not add that the whole thing should be detached and emptied, at least on legal holidays and perhaps oftener.

The writer happened upon the above purely by accident and would be interested to know whether any other "Pencil Pointers" have similar schemes. Come on, smoke up!

E. BARTLETT COCKE of San Antonio, Texas, transmits the program for the gustatory Competition, of the Atelier Karnak, judgement of which was held November 30th. For those contemplating similar events the program is reproduced herewith.

SCARAB INSTITUTE OF INTERIOR DECORATION
Atelier Karnak
FIFTEENTH SEASON

1924-1925

University of Illinois, Urbana, Illinois
Exercise—November 29, 1924, 6 P. M.
Rendu—November 29, 1924, 10 P. M.

Judgment—November 30, 1924, 3 A. M.

PROGRAM

Class "A"—Project II

The Committee on Architecture proposes as the subject of this Competition:

"A MONUMENTAL BANQUET"

The consumption of food by mastication and digestion is a practice which, originating in classic times, has increased rapidly in recent years—particularly in undergraduate communities where it is practically universal.

Convivial exercises are frequently held in the "triclinium" or dining hall and form part of the ceremony, which, though primarily utilitarian, may be treated in an ornate, though dignified, manner.

Menus have taken various form in the past, though they have usually been composed of a balanced parti-

(or ration) containing calories of varying sizes. Animal or vegetable forms, or a combination of the two, such as fish, meat, cereals, pies, sandwiches, together with derived forms such as milk with its various modifications, are the usual motifs and are all suitable for the purpose in view, namely the support of life, and have been occasionally termed motives of support in consequence.

The human form, though sometimes so employed in the past, is not longer considered available in the best modern practice.

The raw materials for such a composition are subjected to heat in certain kiln-like constructions and are then served in a semi-vitrified state in various shaped receptacles whence they are removed gradually by specially designed metallic implements.

The composition of such a menu forms the subject of this problem and will comprise the following services. The precise form and arrangement is left to the taste of the designer but should be so studied as to furnish provision for the greatest possible number of individual helpings, containing not less than 500 calories each, and should admit at various points of temporary receptacles for the deposit of ashes in cinerary urns (or ash trays).

The entire composition shall be placed in a centrally located terrain of irregular outline and rolling topography, of about one quart in cubic content, and shall close the vista and form a point of interest at the end of a much used avenue of approach.

- A. Consomme
- B. Pickles meles
- C. Mignon filet
- D. Rolls chauffes
- E. Pommes de terre mashes
- F. Beans stringes
- G. Salade francais
- H. Creme glace
- I. Cafe au lait
- J. Tabac a fumer

REQUIRED FOR THE ESQUISSE:

Plan, section, and elevation, all at the scale of A Major.

REQUIRED FOR THE RENDU:

The same plan, section, and elevation, all of the scale of B Flat.

The subject of the Class "A" III Project will be: "A Padded Cell in an Engineering Building."

Correspondents are requested to enclose with the projects a printed list of household remedies and of the names and addresses of family doctor. This is necessary for prompt treatment in case of sudden failure.

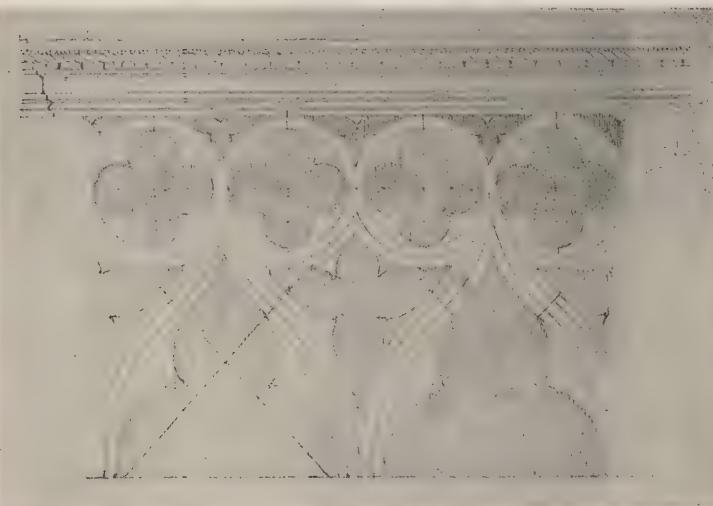
The committee on architecture wishes to caution students against insufficiency in the mastication and digestion of the menu. Projects will be given "Hors Concours" (Hospital Confinement) for departure from the normal in development of the project and for insufficiency of absorption.

For the project rendu no work on crepe paper will be accepted. Use only one side of the paper.

TEAM NEW YORK		DATE 12-2-24										
PLAYER	FRAME	1	2	3	4	5	6	7	8	9	10	TOTAL
MILLENBERGER	28	46	54	61	69	76	86	105	114	123		
HEALY	18	27	47	67	83	90	99	116	127	133		
ZABRISKIE	18	36	54	60	90	119	139	158	176	184		
KING	8	28	48	67	85	101	118	138	163	183		
ACKERMAN	20	47	64	71	80	96	114	123	143	160		
											805	
REED	19	28	37	46	54	73	92	109	116	127		
HEALY	7	25	33	63	88	108	128	158	186	206		
ZABRISKIE	20	40	57	66	95	115	133	142	160	179		
KING	9	29	47	66	86	115	135	153	171	189		
ACKERMAN	20	39	58	67	87	105	115	135	153	173		
											874	
MILLENBERGER	21	47	67	87	105	114	139	152	161	180		
HEALY	20	40	59	78	96	111	119	127	136	145		
ZABRISKIE	9	27	35	65	94	114	132	152	172	190		
KING	9	28	47	56	74	83	103	138	163	185		
ACKERMAN	9	20	45	67	95	125	172	169	176	185		
											889	
TEAM DETROIT		DATE 12-2-24										
PLAYER	FRAME	1	2	3	4	5	6	7	8	9	10	TOTAL
LINDEMAN	27	47	66	83	103	126	143	163	181	200		
KERN	20	39	48	57	76	96	126	136	173	192		
KRECHE	18	26	46	66	96	124	142	150	170	190		
KALSCHED	9	17	37	57	77	97	117	137	157	172		
JOLSON	29	49	66	83	92	112	141	161	170	198		
											952	
LINDEMAN	17	24	43	51	72	90	107	116	125	153		
KERN	27	47	66	75	83	103	133	161	181	199		
KRECHE	20	38	46	53	73	92	101	121	140	153		
KALSCHED	20	38	47	56	76	96	115	134	152	171		
JOLSON	20	40	58	76	85	102	121	130	148	157		
											833	
LINDEMAN	18	27	45	65	84	93	102	122	142	162		
KERN	17	34	43	52	78	96	104	122	131	159		
KRECHE	9	28	37	56	73	82	90	116	136	154		
KALSCHED	9	39	69	98	118	138	153	178	198	216		
JOLSON	29	49	69	89	108	117	136	156	176	194		
											887	

Complete Score of the First Series of Games to be Played by the Architectural Bowling Leagues of New York and Detroit.

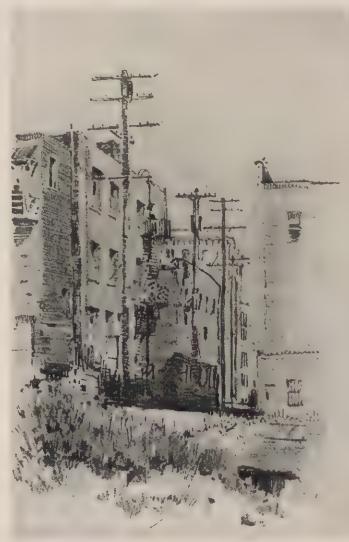
PENCIL POINTS



*Reproduced at the exact size from the Sketch Book of A. R.
Ambrosini, San Francisco, Calif.*



Saw Mills



The Alley



*Old Mill. This Sketch and the Two Reproduced Above Were Submitted by
Norman E. Fox, Tacoma, Wash.*

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IT is probably fortunate that each member of the Pencil Points' family, now over 12,000 strong, does not think exactly as all the others do, which refers once more to the comments received in response to Mr. Callahan's letter published in November. Here they are:

Melville S. Mann of Montreal has this to say:

I am writing you in regard to a letter appearing in your November issue by Mr. H. C. Callahan in which he criticizes the department, "Here and There and This and That." I cannot say that I should like to see this department discontinued, because it contains some matter of a high type. I do feel, however, that Mr. Callahan's contention is in the main well grounded. It is below the dignity of a paper such as "Pencil Points" to produce such trash of a comic nature as we find in this department. There is nothing elevating in such material and it is an offense to men of refined natures who take life seriously.

In the main I enjoy "Pencil Points" and find it useful and I wish the paper every success.

And Carl H. Gewalt of New York has this to say: "Your magazine is very good but I don't see how all these ship models and Ezra Winter murals, and some of the "High School" cartoons are going to do draftsmen very much good. Give us more drawings, measured details, etc. You ask for frankness—here is mine."

And Ernest Olaf of Kansas City, Mo., expresses his opinion in this wise:

OH MUSES! HELP!

Here is a man, with dampers on his fancy,
Whose pride and dignity are shaken, jarred,
By "Here and There and This and That," Oh, Clancy!
Of the Funnies! Here! Save this soul! It's nearly
mired.

For him, can never glow the jewels of humor;
For him, will never flow clear golden wit;
Nor may he ever laugh with old dame rumor,
While she contorts upon the quick cartoonist's spit.

Nor may he ever grasp the subtle prophesy,
Concealed within the drawn lines, good, mean or worse;
Nor ever see the pearls of wisdom, which, like Topsy,
Merge, full grown, from out each doggrel verse.

Oh Muses! Save him!
Else—Just call the hearse.

And then descending to prose, he adds:

"I have sought to give in the above lines my answer to the disliker of one of the most delightful parts of your most interesting publication. Say—if you place it in the middle of each issue, I will guarantee to separate it also, but, I will preserve and bind it, as a most exquisite record of living humane thinking of today."

E. J. Gilbert of Regina, Sask., says a lot in a few lines.

"I think Mr. Callahan's suggestion that "Here and There and This and That" be put in the centre of the magazine is a good one.

"Its the first thing I look for and I never know where to find it."

C. W. Scoville of Albuquerque, New Mexico, takes a good natured shot at the whole situation as follows: "In reference to the query in the November issue I wish to say that I enjoy the "Here and There and This and That" even tho' some of the poets (?) are not carrying brick instead."

Searle P. Pennebaker of Stockton, Calif. contributes this letter to the general discussion:

"Coming back this evening from a sketching trip in Bret Hart's country I found, to my delight, that the November Pencil Points had arrived. So lighting a fire in the fire-place I turned to, "Here and There and This and That," and was surprised to find that someone had been using the hammer.

"I must disagree with Mr. Callahan. We have to be so nice and proper all day, that it is rather a relief to cast aside our official mask and read a few silly verses (such as "Oong Gows") and look at some of the quaint sketches that enliven these pages.

"I had never thought of what my business associates might think of my selection of literature as I do not believe that it is any of their business. One does not lose by being natural and indulging his sense of humor."

And we conclude our program tonight with a quotation from a letter from P. H. Elwood, Professor of Landscape Architecture at the Iowa State College, Ames, Iowa.

"May I take the liberty to comment on the Department of your magazine "Here and There and This and That?" We can not all attain the exclusive heights of Mr. Callahan, either fortunately or unfortunately. In our academic world this department brings a great deal of inspiration, originality and occasional humor, not to mention every now and then a bit of very clever draftsmanship. Especially in this locality we need every bit of encouragement in the way of stimulating the atelier spirit of our collegiate drafting rooms."

WE have to thank Max E. Wright for a very attractive Christmas card. Who says editor of this column is not getting popular?

R. W. R. signing off. Please stand by 'till February!



Water Color Drawing Made in Constantinople by Nicholas Gvosdeff.

"SELLING" ARCHITECTURE

Note—We submit herewith portions of several of the communications received in the competition for the most valuable article on the subject of "Selling" Architecture as set forth in the editorial published in the October issue of PENCIL POINTS. The prize was won by Mr. Torrance Fiske, whose communication was published in full in the December issue. While the problem is tackled from several different points of view it is interesting to note with what unanimity the various contributors suggest the employment of some form of advertising as a means of educating those likely to require the services of the architect. In presenting these extracts we assume no responsibility for the various opinions expressed, but merely lay before our readers the opinions of the contributors without comment or criticism.—EDITOR.

BY CHARLES H. LENCH, NEW YORK.

If architects approached their problem of business getting in a thoroughly business-like manner the public at large would have more respect for them and the architects themselves would tend to become more self-respecting.

Let us get down to brass tacks by assuming that the Board of Directors of one of our great industrial corporations happened to be confronted with the problem set forth so interestingly in your editorial in the October issue of PENCIL POINTS. What opinions would a round table discussion of the situation disclose and what would be the final disposition of the whole matter?

Some of the directors would undoubtedly advance your own opinions. One would advocate contacts with Rotary Clubs and Chambers of Commerce as a means of circulating information regarding the architect's services. Another would favor the preparation and publication of newspaper and magazine articles dealing with the point in question. Still another would advance the theory that architects and draftsmen should "take off their coats" and sell architecture, and all that honest professional service stands for, direct to the public.

Do you not think, however, that after some preliminary remarks of this nature, the Board would adopt the so-called direct-to-consumer advertising campaign in the more important newspapers and magazines? They would reach this decision by concluding that, inasmuch as the general public is woefully ignorant regarding the architect's function in building operations, a campaign of this kind would be the surest and quickest means of effecting the desired educational result. Furthermore, would they not advocate a very liberal appropriation for such advertising?

This brings us to the very crux of the architect's particular problem, namely: that the difficulties experienced by architects as a class are due to IGNORANCE on the part of the general public.

After interviewing hundreds of clients and near clients during a period of more than ten years, we have come to the conclusion that not more than two per cent of an architect's legitimate contracts have, at the outset, even the remotest idea as to just what an architect could be expected to do for them in connection with their projected building operations.

The popular imagination pictures the architect as an artist who draws plans for buildings. Certain individuals, slightly better informed than the average, also believe that an architect has something to do with the supervision of a building. How many people, think you, understand that first to last, every item in a building operation—either from the standpoint of structure, aesthetics, economics or what-not should be controlled and directed by the architect?

Now for the moot question, the very suggestion of which is sufficient to call forth condemnation from that august body, The American Institute of Architects. Is it not time that the Institute or some other Association of architects inaugurate an extensive educational advertising campaign? The expenses would, of course, be defrayed by members. The returns, in which all architects would participate, would far exceed any reasonable appropriation, inasmuch as a vast amount of work that now goes direct to builders could be diverted to the offices of reputable architects.

A prominent country house architect recently told me that he spends on an average of three days with each new client endeavoring to convince him that a fee of ten per cent for highly specialized architectural service is justifiable. Some of this time is consumed, quite naturally, in taking the prospect to jobs in progress as well as those that have been completed. We once had occasion to in-

form a supposedly educated and well-informed gentleman that the architect in question never accepts a commission of less than ten per cent for country house work, whereupon his rejoinder was that this architect must certainly be a "highway robber." What an outrage when one considers the minimum profit, in terms of percentages that a contractor makes on the average building proposition.

To get back to our question. Is there any reason why Mr. Public should not know why plan number fifty-seven in Jones and Co. Inc's latest book of House Designs is not adapted to his particular plot? Why not educate the public on such matters as orientation and its effect on air and sunlight. Why not explain just why it is impracticable and even impossible to secure bids from builders with only preliminary sketches as a basis? With this as a starting point go on to show that careful working drawings, scale details and specifications are essential in order that the architect can secure for his clients competitive bids that will enable them to select the most reasonable builders.

Then again, there is the question of building permits and their various ramifications. The significance of carefully worded and properly drawn contracts as a medium through which the architect safeguards his client's interests could also be set forth interestingly through skilfully worded advertising. That dryest of all subjects, accounting, whereby an architect knows at all times just how much is due the contractor for labor and materials incorporated in the building could also be successfully treated.

These and numerous other items that constitute an architect's professional duties could be told the general public through the medium of simple and convincing advertising copy. There is no logical reason why architects should not emulate the publicity methods of some of the more progressive contractors, sub-contractors and materials men, and regain their rightful position in the scheme of things which, for lack of publicity or what during war times was aptly termed propaganda seems to have departed from them.

When the architects bestir themselves and inaugurate a campaign such as we have attempted to outline, then and not till then will the public demand the architect's services just as it now demands any service or commodity that is faithfully represented through that greatest educational medium in existence for appealing to the masses—the public press.

BY ALBERT K. SANDERS, SEATTLE, WASH.

SOMEHOW, in submitting my suggestions, I am reminded of the well-bred society matron who took in the annual "open house" of the Fine Arts School at the University of Washington. She had just been to the art display and had seen some of the "new" art. When she visited the architectural school she was shown the sights by one of our women students. They paused before some competition drawings (esquisse-esquisse of a moving picture theatre ticket booth). The well-bred society matron took it all in. "How charming! And this was all an inspiration, wasn't it?" The woman student coughed behind her handkerchief. She had done much giggling in her time.

And the more I think it over the more it seems to me that it is up to the architect to come out of it and establish himself by way of the press-agent.

The A. I. A. should plan several series of ads to be run in the monthly magazines such as the *American*, *Good Housekeeping* and others of the same general type. Something like the Copper and Brass, the Paint Campaign, and the like. The only problem is to find the man capable of doing the job in the right way.

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The same is true for local publicity. Ateliers and architectural schools ought to advertise their "open house" periods more. School teachers of the upper grades and high schools can be induced to bring their art classes to these exhibitions. Many parents are taken in tow by their youngsters for further visits. The local A. I. A. Chapter should hold free annual exhibitions showing all competition work, models and perspectives they can get hold of. There should be more traveling exhibitions—not only sketches but finished models and drawings.

I wonder how many of us realize how great the pulling power of the Sunday paper is. The larger ones with rotogravure sections—illustrations of houses with the architect's name as well as the owner's—terra cotta sculpture—more models. Articles in the literary section, in the home section, and in the magazine section. Such a vast historical background as we have can be made clear to the public by a popular history of architecture, discussions of good buildings and why, interior decoration that can combine economy and aesthetic satisfaction without being arty, practical improvements of all kinds. Architectural magazines can be of great service in this way.

By E. W. ANGELL, ILION, NEW YORK.

IT seems, first of all, that Radio lectures, short and to the point, by leading architects, covering the services of an architect in exchange for a client's money would be the most effective and up to the minute method of reaching the greatest number of people. Those who intend to build are generally inclined to take advice from a source which is unknown to them and which cost them nothing, quicker than from their home-town architect; and still, the home-town architect would eventually benefit thereby.

Secondly, a national advertising campaign should be started with advertisements in the form of short snappy articles inserted in newspapers and magazines such as the *Saturday Evening Post* and the *Ladies' Home Journal*. In this way the public might be educated to see the advantages to be received by employing an architect, such as best results in utility of plan and beauty, and savings in cost. The expenses of such a campaign would be defrayed by a "National Architectural Association" composed of architects large and small from all over the United States.

It might be suggested at this point that the best way to roundup the architects of the country would be to appoint the editor of 'PENCIL POINTS,' the *Boss of The Round-up*; his lariat being able to encircle the entire mailing list of architects. His wide experience would enable him to readily ascertain the cost of composing, publishing and broadcasting an annual program of items under some such heading as: "Why the Architect in Building Operations." With this information at his command he could safely figure out just what it would cost each member of the association per annum, basing his calculations, of course, on the assumption that a certain percentage of the entire profession would join.

By GLENN C. WILSON, NEW YORK CITY.

IN your October issue, you deal with selling architecture to the public. Granted that the majority of the architects are what they should be, there should be a national organization to take up the matter of teaching appreciation of architecture to the people who do not consider an architect necessary. This should be handled through an American Association of Architects, and the best method would be to hire a good publicity man for a period of ten years at least, who has access to publicity through feature articles in newspapers and magazines rather than advertising.

By LESLIE A. WATT, DETROIT, MICH.

WHAT more effective salesman can one find than the architect who is a keen and intelligent follower of his profession with a full realization of the significance of economic and other factors and the ability to use them to prove the necessity for his continued existence.

"Selling Architecture" if changed to "Publicity in Architecture" would leave more scope for constructive suggestions as it is something which could follow a well defined policy and be widespread in its effects.

I would suggest as the best means of selling architecture a publicity campaign conducted along well organized lines under the direction and with the approbation of the professional authorities.

By HERMAN R. KAPLAN, NEW YORK CITY.

THE laity's knowledge of building operations is very limited and somewhat distorted. The average client or prospect builds only once and up to that time he rarely if ever has come into contact with building operations of any sort. Most probably the hustle and bustle of workmen at some building which was being erected, attracted and fascinated him at some time or other long enough for him to stop and look on for a few moments. The romance of construction appeals to everyone. But probably that was as close as he ever got. He knows that the workmen whom he is watching are employed by the contractor and as he turns perhaps, sees the large sign displaying the name of the contractor or builder. It is quite logical for him, in the future, to associate the erection of a building with a contractor and attribute to the contractor a marvelous ingenuity which makes it possible for such a building to arise out of the ground. What relation the architect has borne to the work is nowhere apparent to him. He has perhaps heard that an architect is in some way connected with buildings, but his conception of the architect's function is a very vague one. He feels that the architect merely indicates, in a general way, on drawings or plans the sort and character of building that the client wishes, and the builder's or contractor's vast experience and knowledge develops this outline into a concrete form.

In this way a client or prospect has at a very early stage arrived at a distorted view of the relative importance of the architect and the contractor in the work. When the time comes that this prospect wishes to engage in a building operation, the contractor becomes the one whom he first seeks out.

To add fuel to the flames, the builder will assure him that architects seek only to beautify a building and that they sacrifice economy and utility for that purpose. Besides, he offers to furnish the plans free of cost to the owner and thus save him the architect's fees. Those of us engaged in the smaller and medium sized work are well aware of this practice.

It is for us, then, to dispel this prejudice by moulding the opinion of the public to coincide with our own views. Your editorials have suggested some excellent means of doing so, by educating the public through newspaper articles, pamphlets and talks before business organizations. But there are many other sources through which we may reach both the general public and the individual desiring to build. Some of them can be made very effective. Numerous manufacturers of building products and their national organizations continually advertise their products in the popular magazines and periodicals reaching the layman. Most of these products are of the better class and of the type which the average builder will not use, as they will cut down on his profits. On the other hand the architect calls for such materials and specialties in his work. The interest of these manufacturers, then, lies with that of the architect and it is to their benefit whenever an architect is employed. In view of this fact, would not these advertisers gladly assist us in our cause? If all their advertising matter were worded in such a manner as to continually stress the value and necessity of architects' services and suggest that architects are to be relied upon to look out for the owner's interests, would it not be of tremendous value and effect? It might be a subtle form of propaganda, but is it not fully justifiable and is it not the truth?

Another volunteer that might be enlisted to take up the cudgels in our behalf, is the financier. Of the tremendous power he wields in all fields of business activity none of us need be told. In this matter of building operations, the financier's interests coincide with that of the architect's and it is greatly to the advantage of financing institutions that architects be more generally employed.

A building loan or mortgage is secured by the building which is to be erected. Since such a loan is a very large proportion of the cost of the building, it is quite important

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that the building which is its security be readily salable for an amount greater than the loan, otherwise it is no security. It is therefore apparent that the loaning institution is extremely interested in seeing that the buildings which are to be erected on their loans be well planned, well designed and well constructed.

THE LOGICAL WAY OUT

By ALBERT R. DWYER, HARTFORD, CONN.

I AM not an architect—I'm an advertising counsellor, but I lean naturally towards the architects because there have been architects in our family.

Unquestionably, the builder with his factory-made plans and specifications for home builders, the magazines that offer complete plans for a very small sum, the lumber concerns who offer the services of their draftsmen in return for orders, have cut into the legitimate business of the architect. And the fault lies not with the builder or the home owner, but with the architect. He has closed his eyes to a real condition.

Those who are planning to build a home, especially a home in the \$10,000 to \$20,000 class are discouraged at the start by the architect's fee because they don't appreciate what the architect can do for them, nor can they see anything tangible for the money spent in fees.

The problem resolves itself into one of education—a well-directed plan, intelligently and clearly written, to instruct the prospective home builder, to show how a competent architect can save your money in the construction of your home, how he can take ideas and fancies and weave them into a beautiful home, how he supervises the building to see that it is erected properly, how he gives you a comfortable, livable home (not just a house like the other fifteen or twenty on the street) where you can spend many a happy day.

The problem, as I see it, must be attacked locally. Every town and city has its peculiar building laws and regulations. Community ideas differ widely in many parts of the country.

The local press, therefore, is the logical medium to use. It goes into all the homes and gives the most complete coverage of your market.

Newspapers will not print anything that smacks of publicity and free advertising, and any attempt to use their news columns to educate the public will be doomed to failure. Any newspaper man will tell you this.

But you can advertise! "Nothing doing—highly unethical" I can hear you say! This educational idea can be carried out in a way that is eminently ethical. Webster defines "Ethics" as the science that treats of the principles of human morality and duty. The duty rests upon the shoulders of the architect to educate his prospective clients.

A representative group of architects and draftsmen, all, if possible, in a community decide to spend a definite amount of money for educational purposes. This sum is divided into an appropriation for newspaper advertising which consumes about three quarters of the whole, a certain amount for sales letters and other mailing, and a sum for prizes to stimulate suggestions, sketches, plans that may be evolved from time to time by the architects and draftsmen.

The newspaper appropriation will cover a year's advertising (or education, if that word is more ethical) in the local papers. The campaign is to be purely educational, selling the idea of engaging a competent architect to make plans for even the smallest home, the value of the architect's service, as compared to the counsel of the lawyer and the advice of the physician. The campaign is to run regularly and consistently, in space not too large yet large enough to be seen and read. Sketches, by the architects and draftsmen themselves will be incorporated in many of the advertisements, vital statistics that will interest and influence the home builder.

The campaign will be underwritten by the men responsible for it, or it will have no names on it at all, merely reflecting to the credit of the profession as a group.

This idea is logical. It is based on the premise that "Advertising is Education."

ANNOUNCEMENT REGARDING THE WHITE PINE SERIES OF ARCHITECTURAL MONOGRAPHS.

RUSSELL F. WHITEHEAD, for many years editor of the *White Pine Series*, announces a change with respect to this publication in the form of a letter which has recently been sent to all recipients of the Series. We print the letter herewith as an interesting piece of news, especially to those not now receiving the Monographs.

"Sir,

May I count on you as a Subscriber to *The White Pine Series* of Architectural Monographs? This publication will be continued as a personal enterprise after December, 1924, and I will add to my present responsibilities of Editor those of Publisher.

You have been receiving *The White Pine Series* for many years, possibly since it began in 1915, and know its editorial policies, distinctive quality and standard of presentation. Even though the conditions have changed which enabled you to receive it free, I trust you will want to keep on receiving it. Many have said they preferred to be a subscriber rather than a recipient.

The White Pine Series will continue to be the best and most comprehensive treatise on the Architecture of the American Colonies and of the early Republic. This fascinating field has only begun to be explored and recorded. The territory is still full of noteworthy and significant buildings, heretofore unpublished, which have real news interest as well as inspirational value.

The Monographs which have been published are my *Prospectus* for the work which will follow. The intimate character that has made the *Series* notable will be maintained. The scope of the publication will be broadened, however, to include Interior as well as Exterior Architecture and the illustrations will no longer be confined to dwelling houses, but will include whatever of early work has value to the architect.

We are admitting but one advertiser. The advertising copy will be governed by the subject of each *Monograph* so that every number from cover to cover will be a reflection of the survival of *Early American Architecture* in some particular spot, and may be preserved intact as heretofore.

The *Subscription Price* is \$2.00 a year.

As the White Pine Bureau dissolves as a Trade Association on December 1st, that is the date on which I become the new *Publisher*. An admirer of *The Monograph* has apparently expressed the sentiments of many when he wrote that he wished his "subscription entered on the books by December 1st, so that it may signify my good wishes at the launching, failing my ability to break a bottle on the bow."

That you may want to be one of these is the sincerest wish of,

SIR,

Your most obedient, and most Humble Servant,

RUSSELL F. WHITEHEAD

150 East Sixty-first Street, New York

Students, draftsmen and others interested in Early American Architecture may subscribe for the Series by forwarding their subscriptions with remittance to Mr. Whitehead.

Here's wishing the Series and its publisher continued success.

THE Philadelphia Building Congress, C. M. Little, Secretary, Widener Bldg., Philadelphia, has just issued a statement on the selection of general contractors and sub-contractors. This has been done into a four page folder and copies will be sent to anyone interested on application.

M. John R. Johnston, 7932 Fillmore St., Fox Chase, Philadelphia, would like to secure copies of the following issues of *Pencil Points*: June, July, August, September and October 1920. January, February, March, April, August, December 1921.

And Mr. George R. Wright, 2122 Buena Vista, Almeda, Calif. wants copies of July and October 1920.

PENCIL POINTS

NEW YORK ARCHITECTURAL CLUB

THE long talked of Architectural Club for New York, which several committees have been working so hard to organize, has at last become a reality. Papers of incorporation have been drawn up in such a way that various clubs already organized and representing single particular activities (athletic, social or educational) will associate, at the same time not losing their identity entirely. The present plan is for each group (which is representative of an individual activity) to elect their own chairman and secretary both of whom will be members of the Executive Board of the Association.

Each group will draw up a set of rules and regulations governing their own particular activities. These rules and regulations of course will be submitted to the board of directors of the association for approval, but only in so far as they may effect the general policy of the association and the laws of the city and state under which it is incorporated. A MAXIMUM OF INDEPENDENCE MUST BE GIVEN EACH INDIVIDUAL DIVISION for with the passing of individuality, enthusiasm and interest will surely die.

The number of directors comprising the general board and the method of their appointment is still open to debate. Their number will probably be controlled by the number of active members in the various divisions. We hope to publish a complete bill of organization in the February issue of PENCIL POINTS including its scope, requirement for membership, etc.

Following is a letter from Mr Whitney Warren of the firm of Warren & Wetmore, Architects. This is the second in a series of letters to be released for publication. A letter from Mr. Cass Gilbert will appear in the February issue of this magazine.

"Dear Mr. Valentine:

"Referring to our conversation as to the desirability of organizing in this city a club composed of the personnel, high and low, of the architectural offices, I believe it to be most excellent.

"What is most interesting is the future of our profession—that means the care and development of the office staff and draftsmen who, necessarily, will be the large majority of such an organization and who will eventually be the architects of the country. To afford them the opportunity of developing themselves by creating an atmosphere congenial to them—be it for study or sport or interchange of ideas—would indeed be useful.

"The great principle upon which it will thrive is that it is organized with the idea of helping and not in obstructing—in advancing and not retarding—progress.

Yours faithfully,
(signed) WHITNEY WARREN."

ARCHITECTURAL BOWLING LEAGUE DIVISION

L. H. Smith of Warren & Wetmore's team was warned some time ago that his score of 225 would not stand very long. Sure enough our good friend Miltenberger of Donn Barber's team rolled 236. This (to use Smith's own phrase) "just made it more interesting," so in his effort to help lick Cass Gilbert's leading team the other evening he rolled up a score of 238, thus aiding to administer the first defeat to the leading team and making a new high score for himself. However, Poll and his boys made a new high team score of 829 the same night while rolling A. J. Thomas team. This record was formerly held by Peabody, Wilson & Brown's team with a score of 815. Oh well, the season isn't over yet you know.

The first series in our tournament with the Architectural Bowling League of Detroit was rolled Tuesday evening, December 2nd. The score of their first game almost gave us heart failure but we sang our "Hymn of Hate," and wished all sorts of terrible curses on them so that they fell off in the next two games while we came up just enough to beat each one by a small margin. Nothing to brag about you know, but then a game is a game whether it's won by one pin or by a hundred. A complete score of the three games will be found on another page in this issue.

The result of the second series scheduled for Tuesday, January 6th, 1925 will be published in the February issue of PENCIL POINTS.

Our first social gathering of the season will be a dinner dance and theatre party at the Pershing Square Savarin and N. Y. Hippodrome Thursday evening, January 8th, 1925. One of the announcements is reproduced on another page. Mr. G. R. Paradies of McKenzie Voorhees & Gmelin is chairman of the committee. To date he has made reservations for two hundred people.

N. T. VALENTINE, *Secretary.*

Hotel Shelton, New York.

ARCHITECTURAL TENNIS LEAGUE DIVISION

While the wintry blasts are whistling past drafting room windows, plans for the Architectural Tennis Tournament of 1925 are being prepared.

The officials of the Tournament are:—

G. A. Flanagan—Dunn Barber, Chairman
D. M. Plumb—Walker & Gillette, Secretary
Val Kennedy—Dodge Reports, Treasurer

COMMITTEES

Executive Committee

A. F. Darrin—Robert J. Reiley
E. Sheppard—York & Sawyer
G. B. Kayser—J. G. Rogers
N. W. McBurney—Peabody, Wilson & Brown
D. M. Campbell—Dodge Reports
P. A. Singer—Warren & Wetmore
G. A. Flanagan—Dunn Barber—Ex officio
D. M. Plumb—Walker & Gillette, Secretary

Advisory Committee

W. A. Delano
H. W. Corbett
Dunn Barber
Hugh Tallant

Entertainment Committee

A. R. Stanley—Dodge Reports

Publicity Committee

C. D. Arnold—American Architect

Finals Committee

W. E. Meissner—Delano & Aldrich

Poster Committee

A. E. Watson—Dunn Barber

MEN'S SINGLES TOURNAMENT (A)

J. H. D. Williams—Delano & Aldrich, Chairman

This competition is for the trophy, presented by Mr. William Adams Delano, now in the possession of Major Sheppard of York & Sawyer. The entry list is limited to sixty-four and anyone connected with the architectural profession is eligible. Entry fee is three dollars. The draw will be seeded with Sheppard at 1, Lawson at 32, Kayser at 33 and McBurney at 64, and will operate on an elimination basis. To be considered, all entries must be accompanied by entry fees. Address entries to—J. H. D. Williams, c/o Delano & Aldrich, 126 East 38th St.

MEN'S SINGLES TOURNAMENT (B)

A. E. Flanagan—Helmle & Corbett (Chairman)

This competition is for the trophy presented by Mr. Harvey W. Corbett, and is limited to men in the profession who have attained the age of two score years and five. Messrs. Corbett, Tallant and Delano have indicated their intention of entering this tournament and Mr. Cass Gilbert's tennis ability has been mentioned slightly, so it is expected that Mr. Gilbert will take up the baton or racquet.

Entry fee for this tournament is five dollars—Address entries to A. E. Flanagan, c/o Helmle & Corbett, 134 West 42nd Street.

MEN'S SINGLES TOURNAMENT (C)

Ira Tron of Frederick Lee Ackerman (Chairman)

The Tournament will provide a suitable trophy for this competition, which differs from the Class A tournament, in that it will operate on a round robin basis so that each

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competitor will be scheduled to play seven matches in the preliminaries.

The eight survivors will be paired by draw with the eight qualifying in the Class A tournament in the round before the semi-finals.

Entry fee is three dollars—Address entry with entry fee to Ira Tron, c/o F. L. Ackerman, 25 West 44th Street.

MEN'S DOUBLES TOURNAMENT

A. M. Koch—Penrose V. Stout—Chairman

The tournament will provide suitable trophies for the winning team in this competition.

Teams are to be composed of two men from an office where possible.

Individual entries will be received from partners assigned by draw.

Entry fee is five dollars per team or two dollars and fifty cents for individual entries. Send entry with fee to—A. M. Koch, c/o P. V. Stout, 138 East 44th Street.

INTER-OFFICE TOURNAMENT

G. B. Kayser—J. G. Rogers, (Chairman)

This competition is intended to stimulate rivalry between the various offices represented. Until further details are available, it is impossible to predict as to whether prizes will be provided for this tournament.

Teams are to compete in five matches, based on Davis Cup play, with four singles and one doubles match. Address inquiries to—G. B. Kayser, c/o J. G. Rogers, 367 Lexington Avenue.

LADIES' SINGLES

An attempt was made last season to include the ladies in our schedule. We are hoping that this will prove possible during the 1925 season. If sufficient interest is indicated, a Ladies' Singles Tournament will be held and prizes provided. Any lady engaged in architectural work is eligible. Address inquiries to—D. M. Plumb, Secretary, Architectural Tennis Tournament, 128 East 37th Street, N. Y. C.

Although the season is about four months away, it will facilitate the work of the various committees if entries are received at an early date and will insure the competitor against the evils of procrastination.

FEATURES OF OLD SHIPS AS ARCHITECTURAL DETAILS

(Continued from Page 39.)

Yacht Club. Instead of adapting the stern of the ship to the gable of the building Mr. Warren, who is an amateur of ships and the possessor of many original drawings and a fine library of documents on old naval architecture, gave us the original adaptation of "the ship laid up in port"—to use Mr. Warren's expression of the reasoning by which one of the old French drawings of the stern view of a vessel shown in dock, or under the arched roof of a shop, suggested the treatment of the bow windows under the arches to the great model room of the Yacht Club. This bow window is a unique adaptation of naval architecture to a building, and of a practical character that with its sea-going character might well be re-adapted to cabin or saloon features of a modern yacht or "liner." Internally the bow windows, (as indeed all of the interiors of the Yacht Club) might well serve as models of good design to planners of modern ships. The design of ships or at least the saloons of them, had been re-entrusted to several different British and French architects—before the Great War set back the standard of appreciation of the arts by compelling (temporary!) wild commercialism. Few of the works of the architects were of such design as to seem appropriate to the sea, being too much like ordinary pretentious hotel lobbies; and for architecture that is worthy of a great ship it would seem that the best models may now be found in those features of the old ships which have been adapted to architecture on land, or as found in

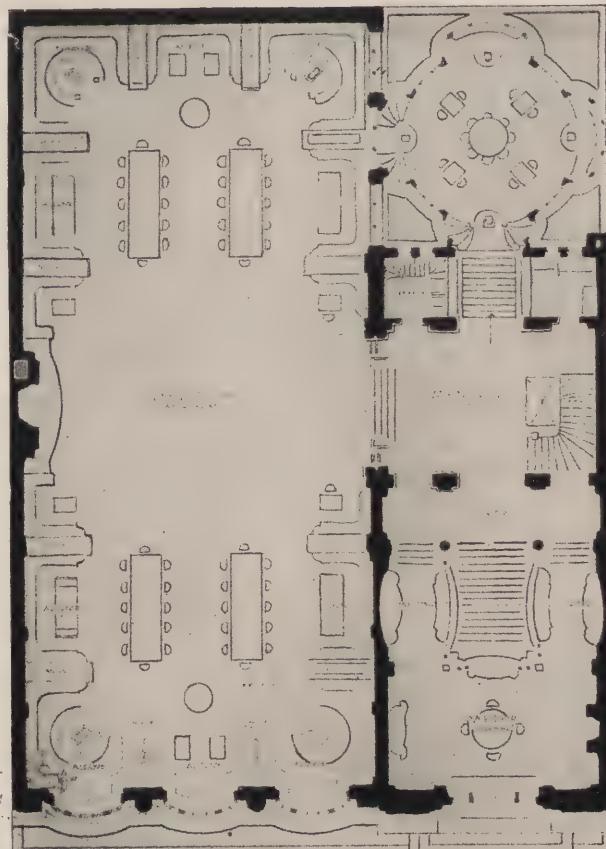
the fine engravings and rare drawings of the seventeenth and eighteenth century ships. The field of naval architecture has been practically usurped during nearly one hundred years by the naval "engineer"—or computer. It has had but little to offer to Americans, anyway, because all of the finer of the ocean ships have been, and still are, built abroad; but the War gave us an acquaintance at least, with ship-building. The Shipping Board and private purchasers have discovered many faults in design of modern ships in general, and in our "standard-type" American-built ships in particular—many of the ugly monsters built during the war and now rusting to pieces in our harbors, might be converted to profitable uses by the application of architectural talent and skill in changing "freighters" into "liners" or "yachts." The considerable ingenuity and attractiveness with which features of naval architecture have been adapted by the architect to buildings on land leads one to believe that it might do no harm if he also went to the seas.

COLUMBIA UNIVERSITY ATELIER

AT a recent meeting of the Columbia University Atelier the following officers were elected for 1924-25: G. R. Tyler, Massier; J. J. Black, Sous-Massier; R. P. Hughes, Secretary; H. Merz, Treasurer; M. Grodinsky and H. N. Gotthoffer, Librarians.

IMPORTANT SALE OF ENGLISH ANTIQUES

ON another page of this issue appears an advertisement announcing a sale in which American collectors may be interested. It is not often that such items are available.



Plan of Main Floor, New York Yacht Club,
Warren & Wetmore, Architects.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART II.

DIVISIONS AND CLASSIFICATIONS.

IN DETERMINING the major divisions of a specification, it is well to bear in mind that, for convenience of reference, each division should bear an index number or letter.

If a numerical system is decided upon, then must one have not to exceed ten major divisions which would naturally be:—

1. Masonry and Excavating.
2. Carpentry.
3. Steel, Iron and Bronze Work.
4. Roofing and Sheet Metal Work.
5. Lathing and Plastering.
6. Marble, Terrazzo and Tile Work.
7. Painting and Glazing.
8. Mechanical Work.
9. Furniture and Equipment.
10. Landscaping.

Every subject of the specifications must fall naturally under one of these headings—or be pushed thereunder.

For some reasons, alphabetical indexing is preferable, principally because one thereby has available twenty-six possible major classifications as against the ten by the other method. If one is addicted to the metric system and carries it consistently through all his office practice, catalog filing, etc., he will, of course, wish to use it also within his specifications.

The writer, however, uses the following alphabetical classification:

- A. General Conditions, including Supplementary General Conditions.
- B. Excavating and Grading.
- C. Foundations and Masonry.
- D. Concrete, Plain and Reinforced, other than Foundations.
- E. Fireproofing and Tile Masonry.
- F. Cut Stone or Terra Cotta.
- G. Structural Steel.
- H. Miscellaneous Metal Work.
- I. Roofing and Sheet Metal Work.
- J. Carpentry, including Finish Hardware.
- K. Lathing and Plastering.
- L. Marble, Terrazzo and Tile Work.
- M. Glass and Glazing.
- N. Painting and Varnishing.
- O. Elevators.
- P. Boilers and Steam Work.
- Q. Ventilation.
- R. Refrigeration.
- S. Plumbing, including Sewerage.
- T. Electrical Work.
- U. Kitchen and Laundry Equipment.
- V. Other Special Equipment.
- W. Furniture (and Equipment without Power).
- X.
- Y.
- Z. Landscaping.

X and Y are left open to be used for miscellaneous items which do not readily fit into any of the other classifications, such as vault doors or a burglar alarm system, when contracted separately.

One's classification should have sufficient flexibility to be readily changeable for different local conditions or jurisdictional trade union rules.

For instance, one would separate Division I if he wished to let a direct contract on pitch-and-gravel roofing with self-flashings to be individually covered by a term guaranty.

There is no division for metal sash or metal doors. Hollow-metal sash are included under I or J, as happens to be most expedient. Solid-metal sash and frames are under

either H or J for same reason or, if in large quantity, may have a separate classification, X or Y.

Dumb-waiters may be under J or, if with power, under O. Ash-hoists and side-walk lifts may be under either D, H or O depending upon which contractor is likely to be in best position to place them.

And so on. But any attempt to be "hard and fast" with one's divisions is liable to lead to embarrassment as soon as one steers away from a general contract. Reasons for doing so are frequently encountered, however, and the best thing for the architect is, of course, to be ready to meet any condition that crops up.

Calling these parts of the specifications "divisions" instead of "contracts" is, by the way, quite a convenience in itself as one can properly state that such or such an item "is not in this division" whereas, if he said "not in this contract," it would prove embarrassing in case both divisions were combined in a single contract.

Naturally the simplest contract method for the architect to handle is that wherein the maximum number of divisions is combined under one contractor, forming a complete general contract. The advantages in so doing are:

1. Reduction in number of contractors dealt with.
2. Unloading on one individual the entire responsibility for the premises and for correlating the work of the various divisions.

3. Reduction in number of contract documents demanded.

The advantages to the owner of separate divisional contracts are:

1. Better control of both personnel and quality of work on the job.

2. Reduction in amount of overhead and profit charged against the work.

3. Reduced costs because of increased competition on divisional items.

4. Gain in time by being able to take bids on some items without waiting until all drawings and specifications are completed.

By carefully combining items for submission to general contractors and leaving out others, one can retain advantages of both systems.

For instance, Division B, Excavating, should nearly always be a sub-contract under C, Foundations and Masonry, if not actually performed by the mason contractor's forces, since he is most vitally interested in seeing that all lines, levels and measurements are properly observed. Further, it is up to the mason, if he sub-lets the excavating, to determine who will dig the footing trenches and do the other hand work.

On large work, especially where footings are installed under extremely unfavorable conditions, it is often advisable to let the foundations separate from masonry and we have many sub-divisions of both excavating and foundations, such as Dredging, Sheet-piling, Pumping, Piling of various kinds, Caisson Work, etc.

Building up a general masonry contract on medium-sized work, however, one can readily add to Divisions B and C, D, Concrete Work, E, Fireproofing or Tile Masonry and F, Cut Stone or Terra Cotta. He needs then only to add J, Carpentry, to make it a general contract. Division I, Roofing and Sheet Metal Work can be conveniently put in also, and there is excellent reason for including K and M.

These two latter divisions, "Lathing and Plastering" and "Glazing," suffer more damage during construction and demand more replacements than any other parts of the work. If included in the general contract, the architect has shunted at least that much grief to other shoulders.

Owing to the need of exact measurements, only to be had at the building, but needed before the work has sufficiently advanced for same to be taken, Division L, Marble, Terrazzo and Tile, is also included in the general contract, especially if not a large order.

Thus is such a contract built up and its components determined.

Even so, one may wish to vary it by buying the cut stone

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or terra cotta independently—even having the producer contract to set it, as is frequently done in the larger cities.

In any event, it is simple and expedient on larger work to let separate contracts for Structural Steel, Painting and Varnishing, Elevators, Heating and Ventilating, Refrigeration, Plumbing and Drainage, Electrical Work and the remaining divisions.

Also, it is well to purchase lighting fixtures independently in order that one may have better control of the selection of both fixtures and their maker.

But, in all the combining and separating of his divisions, one must to a considerable extent be influenced by the preferences of the contractors who are expected to bid. He can't force them to compete, if the form of contract is not to their liking.

Having settled, then, upon the number and extent of the contract divisions, the specification writer can proceed accordingly, leaving for future consideration all questions of the number of contracts to be awarded.

The following safeguard should, however, always be found in the general conditions or supplementary general conditions:

"For convenience of reference and award of contracts, these specifications are arranged in the several divisions indicated, but such separation shall not be considered as the prescribing by the Architect of the limits of the contract of any sub-contractor. Such limitations are exclusively questions of terms between the contractor and his sub-contractor."

Then the contractor cannot place upon the architect the burden of deciding what his "sub" has or has not included in his sub-contract.

PART III SPECIFICATION ENGLISH

Each major division of the specifications, with the possible exception of Excavating, comprehends the providing by the contractor of both labor and materials for the proposed structure. The manner in which a specification is to be worded and assembled depends largely upon how one decides to describe these two requisites.

First, the wording shall not only describe what is to be installed and how it is to be done, but shall, as nearly as is humanly possible, legally compel the contractor to supply exactly what was intended and in the manner intended. The phraseology must have good standing in the eyes of the Law.

Second, Architecture is supposedly one of the "learned professions," therefore must said phrases be rendered into good "Queen's English" or "president's American" or whatever it is that's proper.

For example, if one is to describe the glass in a skylight, one should not say:

(1) "All glass in skylight to be rough wire glass, $\frac{1}{4}$ " thick."

Nor yet:

(2) "Furnish and install in skylight rough wire glass $\frac{1}{4}$ " in thickness."

But rather:

(3) "All glass in skylight shall be $\frac{1}{4}$ " rough wire." or (4) "This contractor shall furnish and install $\frac{1}{4}$ " rough wire glass in skylight."

In any event, the sentence should be complete, not an infinitive such as No. 1, nor minus a subject, as in No. 2.

Whether or not the contractor is mentioned in such a sentence depends upon the context. With a clause in the general conditions stating that the contractor shall furnish all labor and materials of the division, the frequent reiteration of the fact is redundant.

Specifications are wordy enough without undue repetitions. The short form is always to be desired, providing that nothing but words are sacrificed by using it.

"Glass shall be $\frac{1}{4}$ " rough wire" is better than "Glass shall be rough wire glass $\frac{1}{4}$ " in thickness." The word "thick" or "thickness" is quite unnecessary as is any other expression of the obvious.

Brevity can even be quite properly carried to the extent of using a more or less limited amount of phonetic spelling such as "thru" "thoro" and the like. A few abbreviations are permissible, such as o.c., c.s., galv. and a few others, but this practice can easily be carried too far.

On the other hand, some are led into amusing inaccuracies by trying to avoid abbreviations. ADS or AADS are too well known as descriptions of glass to be capable of misinterpretation. But to say "double-thick American" is quite erroneous. The glass is not double-thick, but only slightly thicker than single-strength, and the "A" represents the grade and is not an abbreviation for "American."

In the choice of mode to be used in our text, the subjunctive "shall be" is much better than the indicative "is to be." A safe rule is to always write "The contractor shall" and "The owner will."

The whole gist of specification writ is there expressed. It is a document prepared by the Owner (or his agent) in which he promises he will do thus and so, provided he can compel the other party to do certain things for him. The "shall" and "will" are in conformity with this status and fully satisfy the legal requirements as well.

The serious inconsistency in the whole fabric of architectural practice is that the architect is assumed to be at once the paid agent of the owner and likewise the unbiased arbiter between the two parties to the contract.

It is doubtful if such an absurd relationship exists in any other form of human endeavor. The world over, it is assumed that one's interests lie along the line of his financial reimbursement. Even the high-class expert on the witness stand always faces the imputation, if not the direct accusation, that his opinion is to be had for a price. The jury is told to consider it accordingly.

How then can an architect be expected to be absolutely fair in his judgments?

If he decides a question contrary to the interests of the owner, he jeopardizes his future business from that quarter. If he admits deficiencies in his contract documents, he may have mistakes to pay for. Of course, you and I know that he is *sans reproche* but, if only the public knew it!

If the owner employs an independent superintendent, that individual would more than likely get chummy with the contractor and be found presently to be criticizing the architect and his drawings and specifications more than the builders and their work.

The answer is, of course, that it is incumbent upon the architect to make all his contract documents so nearly perfect that the smallest possible chance will remain for the adverse criticism even of the one who deliberately sets out to find something to find fault with.

LABORATORY SPECIFICATIONS, (CONTINUED)

By OTTO GAERTNER.

THE amount of pitch required is a minimum of one-eighth of an inch to a foot, but it should be remembered that refuse may pass through the strainers of the sinks or get into the gutters otherwise and make it difficult for the water to run off entirely so that a greater pitch should be provided if possible; and the greater the better. One inch should be allowed for the thickness of the asphalt on each side and on the bottom of the gutters. Gutters such as these may be made about six inches wide and have a minimum depth of two inches at the shallow part of the gutter. These dimensions are for the finished gutters, the rough concrete gutters being made larger. When the gutters can be extended to a wall of the room a salt glazed vitrified tile waste stock can be placed in the wall and the gutter connected to it by means of a running trap of this same material.

The trap should be provided with clean out hand holes if possible and a strainer should be placed where the water from the gutter enters the trap. The running traps need not be vented so that only a waste and no vent stack will be needed. The trap should be connected to the stack with an asphalt and cement joint as previously mentioned and if possible to do so the whole trap may be set in asphalt. This would positively prevent any leaks at the joints and in the event of the trap not having clean out holes, the whole trap could easily be removed by welting the asphalt. To embed the trap may necessitate the thinning of the reinforced concrete floor slab or the building of a pocket to extend partly below the slab. Connections of this kind must vary with the different conditions to be met with in different buildings, where the building construction and the available spaces may vary. Also in some cases

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all piping may be specified to be concealed, whereas in others a laboratory is considered as a factory and not as a show place so that all piping may be exposed. In such a case different traps and fittings may be used and left exposed on the ceilings of rooms below. Also they may then be placed so that the openings into the traps will be in the bottoms of the gutters and the asphalt lapped into the hubs of the traps. In the case of the running traps the water enters the traps horizontally, the invert of the traps being placed slightly lower than the bottoms of the gutters and the asphalt being run into the traps a little way and thinned out to nothing. The specifications should describe enough of this work to enable the asphalt flooring contractor to estimate on these unusual conditions intelligently. When the lead waste pipes from the sinks enter the gutters, elbows should be provided at the bottom ends and turned in the direction of the floor of the gutters. This will prevent noise and splashing when water runs into them. The lead elbows may be fattened to spread the water and also to fit easily under the covers of the gutters.

The covers of the gutters are generally made of one-quarter inch thick galvanized checkered steel plate but cast iron or brass may be specified and any desired thickness. When cast iron is specified there should be ribs on the under side to stiffen the covers and to strengthen them against breaking when they are dropped. Covers of any type should be heavy enough to prevent them from moving when they are once set in place, but they should not be too heavy to handle. Sections about three feet long are generally convenient and they must be specified to be cut out or fitted at the waste pipes extending into the gutters. The checkered steel plate covers before mentioned are probably the most economical, they are heavy enough yet thin, can readily be cut and fitted without much delay and are easily handled when cleaning the gutters. They give more clear depth of gutter than the cast iron covers do with the same depth from the finished floors to the bottoms of the gutters. The specification should call for two holes in each cover and it should call for hooks with handles that may be inserted into the holes to lift the covers off. It is well to call for an extra set of handles.

The covers should be about three or four inches wider than the width of the gutters so that they will have enough bearing on the asphalt at each side to prevent them from pressing into the asphalt should it be soft. Metal angles or stripes should be set into the floor to form rabbets to receive the covers. The asphalt within these strips is made enough lower than that of the floor to allow for the thickness of the covers so that the covers will set flush with the finished floors. The angles or strips may be of steel but brass is preferable as there will be less corrosion. If strips are used they should be at least three-sixteenths of an inch thick and firmly anchored to the rough concrete about every two feet, or often enough to prevent them from getting out of alignment when the finished asphalt floor is pounded into place. For this reason also the strips should be thick enough to have sufficient lateral stiffness. If angles are used they will have lateral stiffness but even then the metal should be thick enough to prevent it from being damaged or bent away from the asphalt if accidentally struck by a section of metal cover when the metal covers are set in place after being removed for cleaning purposes. If angles are used they may be made with legs only one inch long but longer legs will give better fastening surface for the anchors and there is less danger of the angles being bent or distorted in handling or shipping.

The angles should be set with the edge of one leg vertical and flush with the finished floor so as to show the least amount of metal unprotected by the asphalt floor. The strips are set vertically for the same reason. It is well not to depend entirely upon the asphalt bearing for the gutter covers. Such a bearing is likely to be uneven especially if the mixture used happens to be a soft one and the covers will press into it unevenly. This would cause the upper surfaces of the various sections of the gutters to set out level and not flush with the finished floor. For this reason it is well to specify small angle knees, or preferably a continuous angle, to be fastened to the angle or strip forming the rabbet. In this way a metal bearing is provided for the covers and the asphalt may be finished flush with the top of the bearing surface.

If there is no waste pipe from a sink extending into a

gutter at its extreme end so that the gutter can be flushed with clear water to remove acids, etc., by opening the water faucets in the sink, it is well to specify a water connection run into the end of the gutter. It should be pointed in the direction of the flow of the gutter. A valve should be placed conveniently near by for flushing purposes and the flushing should be done regularly to eliminate acid fumes which might arise from acids remaining in the gutters. Such fumes will attack all metal substances in the room unless protected by acid-proof paint. We have already mentioned asphalt paint for painting exposed piping but the wall paint should also be acid proof or acid fume proof. Many such paints ready mixed are on the market but before they are specified they should be investigated by looking up records of their use and seeing how the paint has stood the tests. Some manufacturers may be misleading and advertise their paint as acid-fume resisting but then every paint is more or less acid-fume resisting but not necessarily acid-fume proof. In general such paints should not have metallic ingredients.

The question of acid fumes raise the question of ventilation. In some laboratories the fumes are much diluted and do no harm but in others it may be different. Then again the continuous exposure to the fumes more or less concentrated would in time affect the ventilating flues. Such flues are generally built in and are difficult to replace. For this reason salt glazed vitreous hub jointed pipe with cement or asphalt joints is best used if space will permit. Otherwise hard burned terra cotta chimney flue linings may be used, care being taken to have the joints well filled. If every such flue is not entirely surrounded by masonry it is well to apply asphalt to the joints outside the cement and to wrap the joint with canvas or burlap over the asphalt so that there can be no leakage of fumes from the joints. The hub joints of the salt glazed pipe are most easily made tight but the pipe requires more space and can not so easily be fitted in as can the rectangular chimney flue pipe. Vent flues generally extend to the attic where they are concentrated to discharge the fumes through ventilators or preferably vent chimneys. Often the tile flues may be run to a little distance above the attic floor from which point they may be extended in metal to fans, vent chimneys, etc. This is only advisable when the flues are accessible. While the initial cost may then be less than if all tile flues are used, in the end it may be more expensive since such flues in which the acid fumes are concentrated may need to be replaced at frequent intervals.

Tile flues are rather difficult to run horizontally unless they are built into masonry, and such runs are therefore often made of metal. Lead is the best metal to use for such sheet metal flues but they must be stiffened with angle iron stiffness on the outside to prevent sagging and distorting. Care must be taken to make tight joints with tile flues, fans, etc. When the fans are specified a type should be selected if possible that will permit the removal of parts as may be needed to paint the inside and the fan blades with acid fume proof paint. If galvanized iron flues are used they should be painted with the same paint on the inside.

(To be continued)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing the publication. When writing for any of these items please mention PENCIL POINTS.

Modern Mosaic and Terrazzo Floors, Publication A— Brochure with 34 full page color plates showing various patterns of floors suitable for various types of buildings. Drawings showing construction, schedule of costs, specifications and complete data on the subject. 60 pp. 8½ x 11. Cloth binding. L. Del Turco & Bros., Inc., Harrison, N. J.

United Storage Floors.—A new booklet on the subject of modern garage with a special arrangement of floor space, illustrated with six pages of diagrams and other useful data. Standard filing size, 8½ x 11. Garage Experts Association, Louisville, Ky.

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Portfolio of Specification Data.—Covers floor treatments, damp-proofing and waterproofing, interior and exterior painting and technical paints for all uses. Complete specifications of all products and data concerning their application. Standard Filing Size. L. Sonneborn Sons, Inc., 114 5th Ave., New York City.

T. & B. Registers and Grilles.—78th Annual Catalog showing complete line with attractive drawings and engravings, together with prices, dimensions, detail drawings and complete data. 76 pp. 8 x 11. Tuttle & Bailey Mfg. Co., 2 West 46th St., New York City.

Dahlstrom Catalog.—New book with thumb index showing hollow metal doors and trim, moulding sections drawn to full scale and presenting much other data of value in the drafting room, specifications, etc. 100 pp. 8½ x 11. Dahlstrom Metallic Door Co., Jamestown, N. Y.

Atlantic Terra Cotta.—Monthly magazine for architects and others interested in terra cotta. Volume 7 No. 4, illustrates examples of Early Italian Architecture, with full page plates and measured drawings. Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Reversible Window Devices.—Brochure showing line of weatherstripped reversible window types, suitable for many classes of buildings. Illustrations and construction drawings. 8½ x 11. Twinplex Metal Mfg. Corp., 303 Grove St., Buffalo, N. Y.

Color in Concrete.—New folio with large full page color plate and interesting text on the subject. 10½ x 14. Atlas Portland Cement Co., 25 Broadway, New York City.

Ingres.—Attractive little booklet published as a tribute to the memory of Jean Auguste Dominique Ingres, the great French artist. Photogravure illustration of notable drawings. Canson & Montgolfier, 461 8th Ave., New York City.

Mantel Portfolio.—Folder with original photographs of 36 different mantel designs. Arnold & North, 124 East 41st St., New York City.

The Water Supply for Swimming Pools.—Bulletin No. 500 covers the subject completely with blue prints, drawings and photographs. Specifications and complete technical data. 8½ x 11. Graver Corporation, East Chicago, Indiana.

Durastone Cement.—Brochure in Sepia showing application of this material for interior and exterior finish. Illustrations of important work, 8½ x 11. The Durastone Company, Inc., 1105 Metropolitan Ave., Brooklyn, N. Y.

Kewanee Radiators.—Catalog 77 covers subject of modern radiation with illustrations and tables, 6 x 9. Kewanee Boiler Co., Kewanee, Ill.

Published by the same firm, Catalog No. 75, covering Water Heating Garbage Burners. Uniform with above. Also Catalog No. 78, Firebox Boilers. Much technical information, blue prints and data on boilers for all types of buildings. Also Catalog No. 79, uniform with the above, covering subject of Power Boilers.

Bathroom Accessories and Steel Cabinets.—Catalog illustrating complete line, together with roughing-in dimensions, specification data, etc. 40 pp. 8½ x 11. Jos. A. Hoegger, Inc., 351 Palisade Ave., Jersey City, N. J.

E-S Bulletin.—Monthly bulletin on the subject of automatic elevator signals and other elevator equipment. 8½ x 11. Elevator Supplies Co., Inc., Willow Ave., Hoboken, N. J.

Interlocking Grating.—Booklet describing line of grates suitable for many uses in modern industrial and commercial buildings. Tables and much useful data. 24 pp. Mitchell-Tappan Co., 15 John St., New York.

The Right Angle.—Monthly magazine for architects and others interested in fireproof construction. The issue for November presents interesting notes on ancient and modern structures, also specifications for stucco work, two pages of construction drawings, etc. 8½ x 11. General Fireproofing Co., Youngstown, Ohio.

Water Softening and Filtration.—Treatise on the subject covering requirements of public buildings, institutions, hotels, hospitals, etc. Blue prints and technical data. 32 pp. 8½ x 11. Wayne Tank & Pump Co., Fort Wayne, Indiana.

Church Furniture.—Brochure covering subject of modern church seating and other church accessories in wood. Illustrations showing typical seating arrangements. 48 pp. 8½ x 11. American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Dumbwaiters.—Booklet covering the subject of modern dumbwaiters for various requirements. Drawings showing installation and complete data for the draftsman. 8½ x 11. Energy Elevator Co., 214 New St., Philadelphia, Pa.

Published by the same firm, Elevators, a companion volume of the above covering all types of power and hand power elevators for various uses.

Pantry Sinks.—Illustrated booklet showing complete line of equipment in copper and other materials suitable for high-class residences, hotels, club houses, restaurants, etc. Detail drawings and complete data. 30 pp. John Trageser Steam Copper Works, 445 West 26th St., New York City.

Sanitas.—Brochure with many color plates illustrating decorative treatment or different rooms, together with actual samples of wall materials. The sample book shows complete line suitable for every room in all types of buildings. Standard Textile Products Co., Inc., 320 Broadway, New York City.

The Age of Plate Glass.—Attractive booklet on the manufacture of modern plate glass. Interesting illustrations and sketches for unusual uses for this material. Plate Glass Manufacturers Assn., First National Bank Bldg., Pittsburgh, Pa.

Equipping Your Home Electrically.—Booklet showing the most economical methods of wiring the modern residence, together with much useful information on the general subject of wiring and electrical equipment. 8½ x 11. 50 pp. Lighting Educational Committee, 680 Fifth Ave., New York City.

Heights of Brick Courses.—Four pages of tables worked out for the information of draftsmen and designers on all types of brick work. Also notes on detailing of stone. Indiana Limestone Quarrymen's Association, Box 500, Bedford, Indiana.

Globe Automatic Sprinklers.—Booklet on the subject of modern sprinkler application. Layouts of typical sprinkler systems, etc. 36 pp. 8½ x 11. Globe Automatic Sprinkler Company, 2035 Washington St., Philadelphia, Pa.

The American Outlook.—Monthly publication on the subject of equipment for the modern laundry. 8½ x 11. American Laundry Machinery Co., Cincinnati, Ohio.

24 Hour Concrete.—Booklet on the subject of Lumnitene Cement giving full strength in 24 hours. Suggestions for uses, properties, etc. 32 pp. 6 x 9. Atlas Portland Cement Co., 25 Broadway, New York City.

Heat Insulation for Houses.—Data on heat transmission through various portions of the house, tables showing fuel savings by the use of proper insulation. Construction drawings showing draft construction and much other useful data. 8½ x 11. 24 pp. Flaxlinum Insulating Co., St. Paul, Minn.

The Heating Book, 1924 Edition.—Complete data on the subject, convenient pocket size. 216 pp. International Heater Co., Utica, N. Y.

Tarnia Bath.—Brochure with color plates illustrating this type of bathtub. Blue prints with suggestions for installation. 8½ x 11. The Crane Co., 836 So. Michigan Ave., Chicago, Ill.

Published by the same firm, Crane Brass Goods, Folder illustrating specialties for the modern bathroom. 8½ x 11.

Detailed Directions for Laying and Caring for Linoleum.—Handy booklet, 3rd Edition showing proper methods of installing and caring for linoleum floors. Covers laying on concrete, wood and other bases. Armstrong Cork Co., Lancaster, Pa.

Turn the Faucet any Time.—Booklet illustrating and describing automatic water heaters for the residence. Color plates, sectional drawings, and complete data. 34 pp. Rudd Mfg Co., Pittsburgh, Pa.

Kreolite News.—Monthly publication on the subject of Woodblock Floors with especial reference to industrial plants and other places where heavy duty is required. Also adapted to the use of grille rooms, armory floors, etc. Jennison-Wright Co., Kreolite Bldg., Toledo, Ohio.

Factors in Figuring Heating Requirements.—Treatise on the subject of air leakage in the heating and ventilation of modern buildings. 54 pp. Monarch Metal Products Co., St. Louis, Mo.

Betzeo Equipment.—Equipment for the modern kitchen and bathroom. Kitchen units, bathroom cabinets, broom closets, etc. Frank S. Betze Co., Hammond, Ind.

Floor and Roof Drains.—Illustrated handbook showing up-to-date practice, diagrams, specifications, and much useful data. 80 pp. 5 x 6. Josam Mfg. Co., Michigan City, Ind.

The Story of Shearduct.—Brochure illustrated with full page pencil drawings of buildings by prominent architects in which Shearduct has been used. Specifications and 6 pages of sectional drawings. Tables of dimensions, etc. 40 pp. 8½ x 11. National Metal Molding Co., Pittsburgh, Pa.

National Steel Fabric.—Illustrated book for the information of architects, draftsmen and builders. Covers various types of stucco work with working drawings and much useful information. 32 pp. 8½ x 11. National Steel Fabric Co., Union Arcade, Pittsburgh, Pa.

Standard Specifications.—Roofing, waterproofing, damp-proofing and insulating. A. I. A. File No. 12-B-1. Looseleaf. Construction drawings. 32 pp. 8½ x 11. The Richardson Co., Lockland, Cincinnati, Ohio.

Jenkins Valves.—Handbook No. 21 for the architect, specification writer and engineer. Shows valves and fittings for general use in building construction. 270 pp. Convenient pocket size. Bound in cloth. Jenkins Bros., 80 White St., New York City.

Switchboards in Architecture.—New publication A. I. A. file 31-C-2 dealing with the subject of switchboards of various types suitable under varying conditions. 20 pp. 8 x 11. General Electric Co., Schenectady, N. Y.

Nemadji Tiles.—A set of blue prints in portfolio form showing various patterns of tiles drawn to scale, valuable for immediate use in the drafting room. Strait & Richards, Inc., Newark, N. J.

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VOLUME VI FEBRUARY 1925 NUMBER 2

TEMPERAMENT

OPERA singers and architects are temperamental, so also are captains of industry. Temperament is the driving force in all art work, and in all other work, for the matter of that. But temperament as an excuse for laziness, bad manners and general inefficiency is about as big a liability as a man can be cursed with.

Draftsmen and architectural students, being potential architects, come in the same class, and much of their "charetting," as well as much of the failure to rise rapidly in the work of the office or to distinguish themselves in their school work is due to temperament gone wrong.

It is true that the conception of a design that embodies the best there is in one calls for a period during which the designer saturates himself with the problem and with the means of solving it, a period of apparently aimless inquiry and study of the requirement, the nebulous stage. Then comes the crystallization of the idea, the making of the *parti*. After this comes the grind of getting the *projet* onto paper. Chrette! Chrette! Then a let-down. Though this is not, of course, the procedure followed by every one it is general enough to have become recognized as the common practice, as is attested by the instant appreciation by the layman of such stories as the following: A. "My brother is an artist." B. "Then I suppose he works by fits and starts." A. "No, that's not my brother, he works by fits and stops."

Now there is nothing wrong with the working method outlined above, it is the tendency to use it as an excuse, primarily to one's self and secondarily to others that causes the mischief. It leads to a more or less conscious glorification of faults until they assume the guise of virtues. It tempts one to dilatoriness in making the preliminary study, to rashness in the making of the *parti* and, time having been wasted at the beginning, to unnecessary charetting at the end—and the excuse, the temperamental character of the work. It is well to note right here, that it is an excuse that is not used by the best men, they don't have to make excuses.

But it is a simple fact that the nature of the work is such that there are the dangerous tendencies pointed out above. It is important that these tendencies be recognized as dangers and overcome by the exercise of intelligence and will power.

A surgeon's work in performing any important operation, the kind he does constantly, calls for complete concentration of his powers—of his intellect and nerve force, still the good surgeon is on the job day after day, well groomed, alert and calm, he has the poise of a man who is master of his life and work. Some architects have this poise. It would be well if this air of competency could be made a characteristic of the profession in general. Correcting the false idea of temperament that is current in many quarters would help towards this end.

Temperament as an excuse for ignorance of construction methods, building materials and equipment, is a bad thing. The man who disdains the "practical" because he regards himself as a "designer" is limiting himself and destroying his chances of ever becoming a really good designer and a properly equipped architect.

Temperament never is the cause of failure, it is the lack of the qualities that should go with it that makes the trouble.

The men of the Renaissance were temperamental, so were the men who created the monuments of Gothic architecture and so were the architects of the great buildings of Classic times. But those who amounted to anything were efficient workers. It takes intelligent application and the conservation of health and energy to accomplish good work.

The possession of temperament in a marked degree implies a strong sense of individuality, sensitivity to impressions and strong reaction to stimulus either from within or without. Most people with a grain of common sense like to be thought anything but temperamental, for the simple reason that one seldom hears of temperament excepting as an excuse for vagaries, shortcomings and exhibitions of bad temper. Temperament *does* cause these things, but it also causes everything worth while in a person's life and work for it is the driving force. When backed by physical vigor and coupled with common sense, intelligence and a willingness to work it gets results. Instead of causing inefficiency it then enables a man to go through drudgery, to face adversity, to hang on and keep going till he wins.

Figure 12. Water Color Drawing by W. Walcot, St. Mary's Church, The Strand, London.



ARCHITECTURE IN PICTURES

FREE RENDERING

BY FRANCIS S. SWALES

SCHOLASTIC training on one hand and personal style on the other are the two main characteristics of presentation drawings of distinction. Drawings with lack of distinction are the common kind and though often enough they are the work of men of training they are nevertheless uninteresting. One of the faults is lack of thorough workmanship, which sufficient scholastic training should teach until it becomes a habit. Lack of individualism in the work of the great number is simply due to insufficient natural capacity to gain anything valuable from training. American public and high school training has a way of producing stock-pattern intellects and machine made minds and, insofar as the finer things of life are grasped at all, it is the technique rather than the substance; and to the almost entire exclusion of spirit, or nature. In the higher training, technique becomes an American passion. Even at the great French *Ecole* several of our men have achieved note on account of their technique; but with such note has often been coupled the observation that it is brilliant, but superficial and artificial. In other words, that it lacks instinct and natural impulse in the way it conveys such ideas as it has to convey, and the technique—the vehicle—is better than the art, the load it carries, the ideas and feeling. American students as a rule, therefore, show up better in *projets* of archaeology than in *projets* of design—because the technique serves to show to advantage the qualities of design in the art of the old masters, or an adaptation of it. On the other hand may be found those who somehow escape the meretricious, the few—very few—who because of sincere interest have gained freedom through knowledge of the truth. Such interest is mainly instinctive, but sometimes acquired partly through scholastic training.

Freedom is essentially in knowing the truth, in attempting to distinguish between the progress of the fine and beautiful from the course of the ordinary. Truth, like everything else, is relative. It, of course, may be taught without being learned, or vice versa, provided only there is the capacity to learn and the instinct to use such capacity. The thought usually expressed in speaking of free rendering is that which is "free" from academic conventions. Such "freedom" is a partial release from painstaking method—and is a "picture," or perspective, as different from a mechanical drawing, or a sketch (rough drawing), as from a finished piece of work—something that is felt to be drawn mainly for the pleasure or self-expression of the maker. "Doing all the things you are taught not to do by the professors and doing everything you are advised not to do" is the definition by a young friend of mine who is still in college! A more experienced delineator has expressed the opinion that "free ren-

dering is the combined use of all mediums—water color, crayon, pastel, charcoal—anything so long as it is not an India ink wash drawing—which is synonymous with 'slavery'."

It is in the sense of producing a *picture* of an architectural subject, or in which architecture becomes so important in the general interest in the composition as to be the essential part of it to architect or draftsman, that note will be made of such rendering here.

To produce a picture such as to interest the layman who is not acquainted with architectural styles requires more technical equipment than even many of the best architectural draftsmen possess. It includes either, or both, the excellent portrayal of the human figure or drawing of interesting landscape and done in such manner as to give the part under "the spot-light" and to render the architecture, however splendidly, as an accessory to the more important incident. Thus the work of painters becomes a better agency for the instruction of the public in architecture than the work of architects and the public may become more interested in the architectural part of such pictures than in the subject or central motive of the picture.

The work of Lawrence Alma-Tadema is notable in that respect. His pictures have always a popular attraction, causing interest, fascination and study on the part of people little acquainted with art as well as to the accomplished connoisseur. Often the first attraction in them to the casual observer is a feature of minor importance to the subject-title. Such feature directs attention to the title motive, from which the eye wanders easily and without distraction to the detail of the architectural accessories, by which token the beholder will step back a pace or two to study the whole effect and thereupon become especially interested in the architecture. His picture entitled "The Sculptor's Studio," in the Glasgow Gallery, illustrates the above points and even in reproduction, without its magnificent coloring—which is the painter's primary concern—its interesting qualities of design and rendering are unabated. The group of light toned figures and the fleeting expression of the faces provides the theatrical attraction. The direction of their gaze transfers interest from the old man to the young couple and from them to the statue and sculptor while the direction of interest expressed in the face of the latter centers the attention of the beholder upon the statue. The beauty of finish to the design of the pedestal and of the ornamental capitals and frieze continue to hold the spectator and finally his interest becomes greater in the "accessory" architecture than in the human and sculptural elements; but it is only after we have discovered that the main interest lies in the architecture—as it did in most



Figure 5. Sketch of Old Dutch Town by William R. Emerson.

of Alma-Tadema's pictures that we realize that he was *rendering architecture* as his actual motive with sculpture and the human figures as the actual accessories. What a mighty benefit might have accrued to architecture of the United States had it been possible to have combined the salesmanship of architecture in Alma-Tadema's designs and pictures with the personal prowess in selling "architectural service" of the late D. H. Burnham! It becomes a mere *by-the-way* to note that a black and white reproduction of a picture such as the Sculptor's Studio serves as an admirable, but difficult, model for a fine academic rendering of architectural perspective. But without years of experience in the simpler kinds of such rendering any attempt to copy, as study, a work such as this would be foredoomed to failure.

In the work of David Roberts we find the same central motive of rendering architecture with the human and dramatic incidents actually accessory while holding the center of the stage and at first sight the *raison d'être* of the picture. Roberts' lithographs make excellent models for free rendering of architecture as their qualities of indication and composition are easily translated into other media and other forms of architecture. Roberts not only displays a great deal of his own imagination in his work by giving his subjects a quality of scale, dignity and power, but he had also the wisdom always to leave plenty of room for that attribute of

students of his style. In his picture of "The Bull Ring," Seville, the figures in the bull fight are the finished part of the rendering, but the background—a simple architectural rendering—soon takes precedence in holding the interest of the spectator. Roberts' renderings show the skill of the expert workman using method in building up his effects.

Jean-François Raffaëlli has painted architecture, or the general masses and color of architectural subjects, in a way to seem to demonstrate that free rendering may be "doing all the things you are taught not to do by the professors." But while Raffaëlli's pictures direct attention to architecture in that it plays the striking part, and while they sometimes bear titles such as "Notre Dame de Paris"—leaving us in doubt as to whether the church or one of the ladies in the foreground was meant—his real object was to give his impression of the movement of light and air in the picture and the subject was nothing in particular, simply a beautiful study of moving color. His representations of architecture being of the impression given to the eye in motion, are—perhaps intentionally—somewhat out of drawing, although his excellence of perspective shows he *knew* that subject as well as "sensing" it. Raffaëlli worked with pastels or brush; also with sticks of oil paint of about the consistency of hardened shoe blacking, about the size of an ordinary piece of black-board chalk. In working at his street sketches he had the appearance of painting with

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Figure 14. Early Rendering by Birch Burdette Long.



Figure 2. Lithograph by David Roberts.

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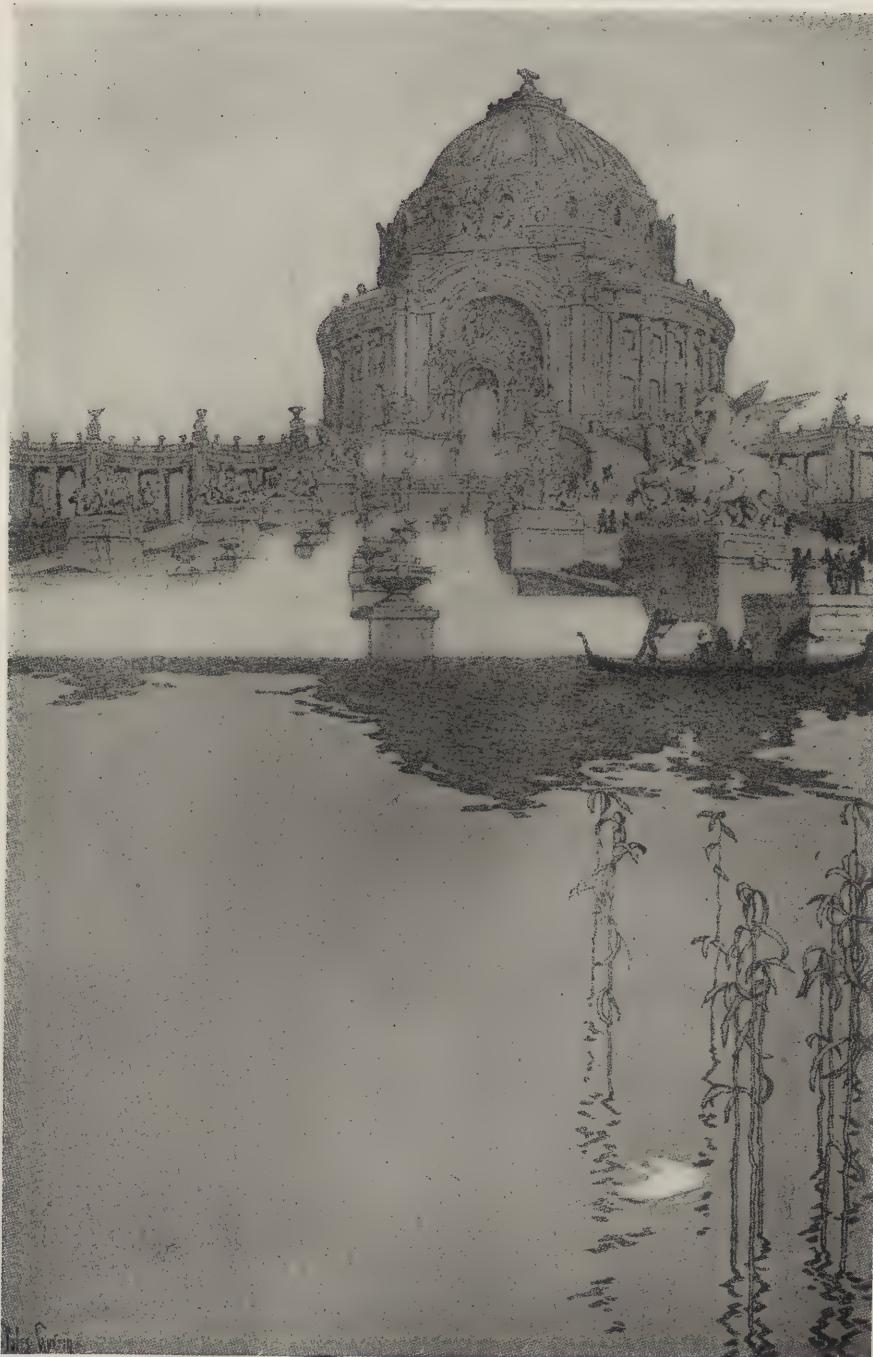


Figure 3. Pastel by Jean François Raffaëlli, "La Place St. Germain des Prés."



Figure 13. Water Color Drawing by F. Hopkinson Smith.

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Figure 15. Drawing by Jules Guerin. Festival Hall, Louisiana Purchase Exposition, St. Louis, Mo. Cass Gilbert, Architect.

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Figure 10. Lithograph by Joseph Nash, Beauvais Cathedral.

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Figure 10. Lithograph by Bonington,
"Jour du Marché."

little jabs of his thumb. Whether because of, or in spite of, his non-academic and perfectly free style of rendering, his sketches look more like the actual buildings, places, people and atmosphere of Paris than the work of any other artist that I know. He made some of his paintings in the streets—"open air sketches"—and three or four feet long, at that! For indication of people moving about in the street—the kind wanted for architectural sketches and perspectives—there are few, if any, to equal his.

An American architect who painted and drew in pastels, splendid sketches of architecture with notable individual style, was William R. Emerson of Boston. His sketch of an *Old Dutch Town* was drawn in pastels of rich colors on a shingle, the grain of which was utilized in the indication of sky and water while the pastel was pressed into the wood to give a solid effect to the buildings. Another of his interesting sketches shows the interior of a church broadly sketched in the manner of Rembrandt's paintings with the lighting coming apparently, from one window only and striking upon one column, the pulpit and a group of people, all surrounded with darkness and in the distance a glimmer from places in a stained glass window—just

enough to indicate vaulting in the ceiling without calling upon the artist to draw it. Emerson, although an architect of great talent, was a painter by nature and his pictures made one forget everything else in the bewitching effect of the rich harmony of his coloring. His sketches are remarkable "short hand" notes of form and color, but they contain no information whatever, and hardly an indication anywhere, of architectural detail.

Henry C. Brewer, an English artist who painted dramatic decorative pictures of the sea, and drew very effective pictures of churches and other medieval buildings, was a master of indication who, though he drew a great many lines, indicated a prodigious amount of detail and ornament without drawing much of it. There's a great deal of method and knowingness in Brewer's manner of surrounding his principal high light with soft tones grading down to strong darks in the foreground; and the mannerisms suggest that his drawings were made in the studio and perhaps afterwards colored at the building. Painters nowadays often make their outline



Metropolitan Museum of Art.

Figure 9. Painting by George H. Yewell.
St. Mark's, Venice.

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drawings from photographs, completing the picture by correcting the drawing and coloring it at the building. Frequently, also, only a few color notes are taken at the site and most of the actual rendering is done at the office or studio.

The painting of the interior of St. Mark's at Venice, by George H. Yewell, is an admirable example of architectural drawing with the brush. It has all the appearance of having been painted at the site by a painter who uses both eyes to study his subject and has found the architecture with its decoration of sculpture, mosaics and painting of sufficient interest to him without the accessory of human action—the dim figures in the distance are introduced for no more than an architect's ordinary purpose of giving correct scale.

Of the representation of architecture by painters there may be said to be in them a great deal of drawing "the thing as he sees it for the God of things as they are" and that is an advantage over the drawings of architects, who, at their best, draw the thing as they know it to be rather than as they see it and add what they wish to see. Compare the picture by Bonington, *Jour du Marché* (Market Day) with that of Joseph Nash, entitled "Beauvais Cathedral." The similarity of composition is striking but in the rendering comes a marked difference

of knowledge. Bonington, the painter, paints the tower in the background and people in the foreground as he sees them and his values—quantities of light—are *natural* or free from circumscribing knowledge. His subject is in the foreground, but it does not force itself out of the picture, while the receding buildings and tower take their proper planes. Nash, the skilled draftsman and architect knows too much of the architecture of Beauvais Cathedral, draws in the detail he knows to be there—but which only the trained eye of the architect could detect at such distance, finds his subject riding the roofs of the cottages; and to pull these out from under the weight of the church darkens the roofs of the dormers and is then forced to use dense shadows and intense high lights on the buildings and people to bring them into the foreground. The effect is theatrical—unreal—as of a stage setting under a flood light from the "O. P." gallery.

Such rendering can hardly be considered as anything more than unsound academic work. With an infinitely more beautiful subject he fails to produce the pleasure-giving quality of Bonington's work. The superiority in the latter lies in the quality which painters call "feeling"; the inferiority of the drawing of Beauvais in that which is known as the "taint of the studio"—or working by rule and formula—



Figure 4. *Notre Dame de Paris*, by Jean François Raffaëlli.

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Figure 1. *The Sculptor's Studio*, by
Lawrence Alma-Tadema.

which after all is not *free* rendering. As both are about a century old, the one may be regarded now as an antique curio, the other as a precious example of fine art.

Coming to contemporary painters who render architecture I have selected four illustrations typical of the best modern individualistic work: examples of W. Walcot, F. Hopkinson Smith, Jules Guerin and Birch Burdette Long. Walcot and Hopkinson Smith's styles are both naturalistic and "pictorial" (not decorative); Guerin's and Long's are both decorative in style with individual conventions for the representation of naturalistic elements. Guerin and Walcot both have the basis of good school training. Hopkinson Smith and Long, on the other hand, were mainly self-trained. Each of the four struck out along new paths of his own making. Walcot has become known for his brilliant etchings; but also works in clear color and with a dashing style records fleeting impressions, formed apparently before he sets brush to paper. Then the brush seems to merely skim over the surface and with the first touch represents the final intention of the artist as to value and quality. His brush seems to run out of pigment in his foreground and touch only the high spots of the rough paper. Hopkinson Smith worked on tinted papers, sketched his outlines in charcoal and put in his washes in *gouache*

after the manner of painters of stage scenery. His style was sketchy and superficial with not an atom of the grace and dignity of that of Alma-Tadema, without much of the life that characterizes that of Raffaelli and the deep sense of sumptuous color of Emerson or the brilliance of imagination shown in the composition of David Roberts and Henry Brewer, but it was immensely clever in directness and full of an unmistakable and pleasing individuality.

The illustrations of early work of Messrs. Guerin and Long serve to show that where capacity to acquire an equipment of technique exists in combination with an individual point of view, it matters nothing whether training is obtained in or out of school. Practice and experience have developed the individualism of each of these artists to such degree that neither would be likely to regard our illustrations as representative of his work today but they serve as evidence of the early development of free expression of things as they are,—a technique is acquired. Simplicity and directness are definitely the com-

(Continued on page 56)



Figure 6. *A Church Interior*, by William R. Emerson

*Figure 7. Valencia Cathedral, Spain.
Water Color Drawings by Henry C. Brewer.*

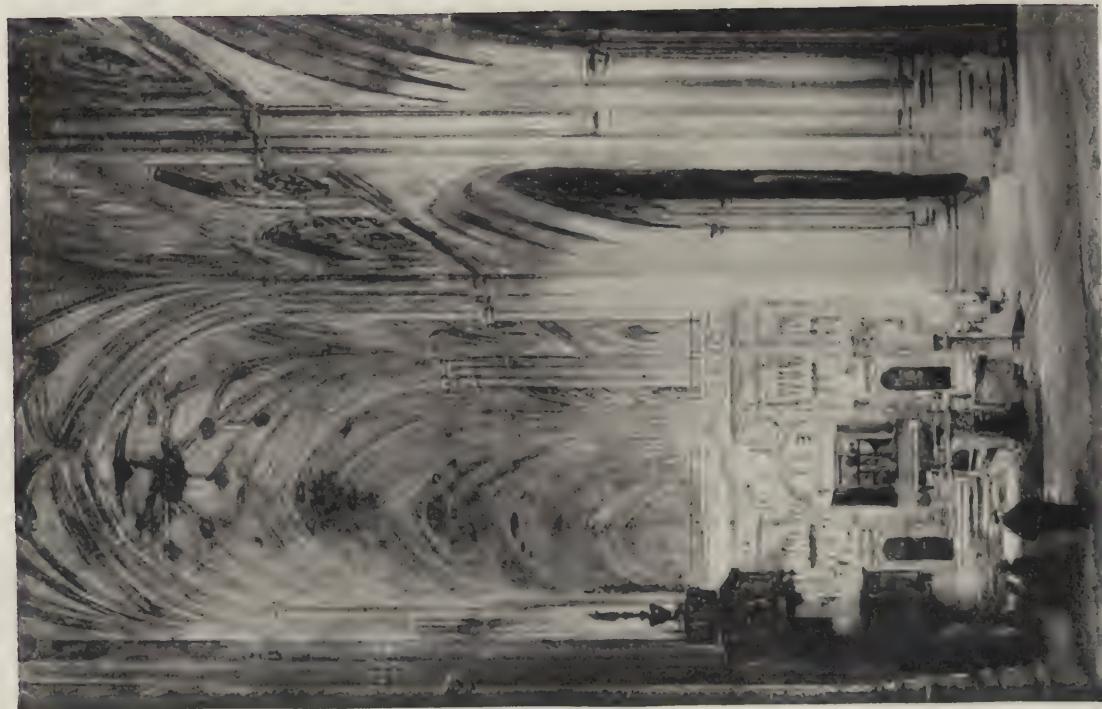




Figure 7. Study for Proposed Hotel. C. Howard Crane, Architect, Elmer G. Kiehler, Ben A. Dore, Associates, Detroit, Mich.

DESIGN IN THE DRAFTING ROOM

BY JOHN C. BREIBY

THE rapidity with which new requirements are developing and have to be met decidedly quickens the progress of the times. The architects have in no way stood aloof from this progress. Their offices have been organized to meet the present day needs without taking away from any one the exercise of taste or inclination of the individual in the organization. In this connection let me say a few words to the younger men. A somewhat erroneous opinion prevails that in the larger offices an employee is given only one kind of work to do during the entire period of his connection with a particular office. This is not often so, and if the average draftsman will look back over the experiences of but a year or two he will recall quite a varied experience. There are, of course, some men who take pride in doing some one thing exceptionally well and can be used to the best advantage of the organization to do this particular work. However, should this work become constantly monotonous and no other branch of the work is to be had it is far better to seek another position than to work in a spirit of unhappiness that clogs the mind and prevents clear thinking.

Correct and proper thinking brings forth new and good works, and architecture must be a good work

or it is not architecture. It is not limited to the making of a pretty picture; its scope embodies all that makes for a building, without and within, from the first conception in the design sketch to the installation of the front door locks and each of the intricate details of design, plan, construction, mechanical equipment, etc.,—all well balanced parts knitted together.

Mr. Chauncey M. Depew in his recent book, "My Memories of Eighty Years," mentions a very interesting incident in speaking of his recollections from abroad: "The sermon was worthy of its wonderful setting. Westminster Abbey is one of the most inspiring edifices in the world. The orator has to reach a high plane to be worthy of its pulpit. I have heard many dull discourses there because the surroundings refuse to harmonize with mediocrity." What a glowing tribute to the architecture of the edifice. Mr. Depew recognized "The beauty of Holiness," as expressed in architecture. The very design echoed to him the fitness of harmony in the lofty words of the speaker.

It is impossible to over-estimate the value of fitting and good design. The untutored will often stand in silent admiration before a work of beauty and that work of beauty need not necessarily mean

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Figure 1. Preliminary Sketch Study for an Elevation for a Building at Columbus, O. C. Howard Crane, Architect, Elmer George Kiebler, Ben A. Dore, Associates, Detroit, Mich.

PENCIL POINTS

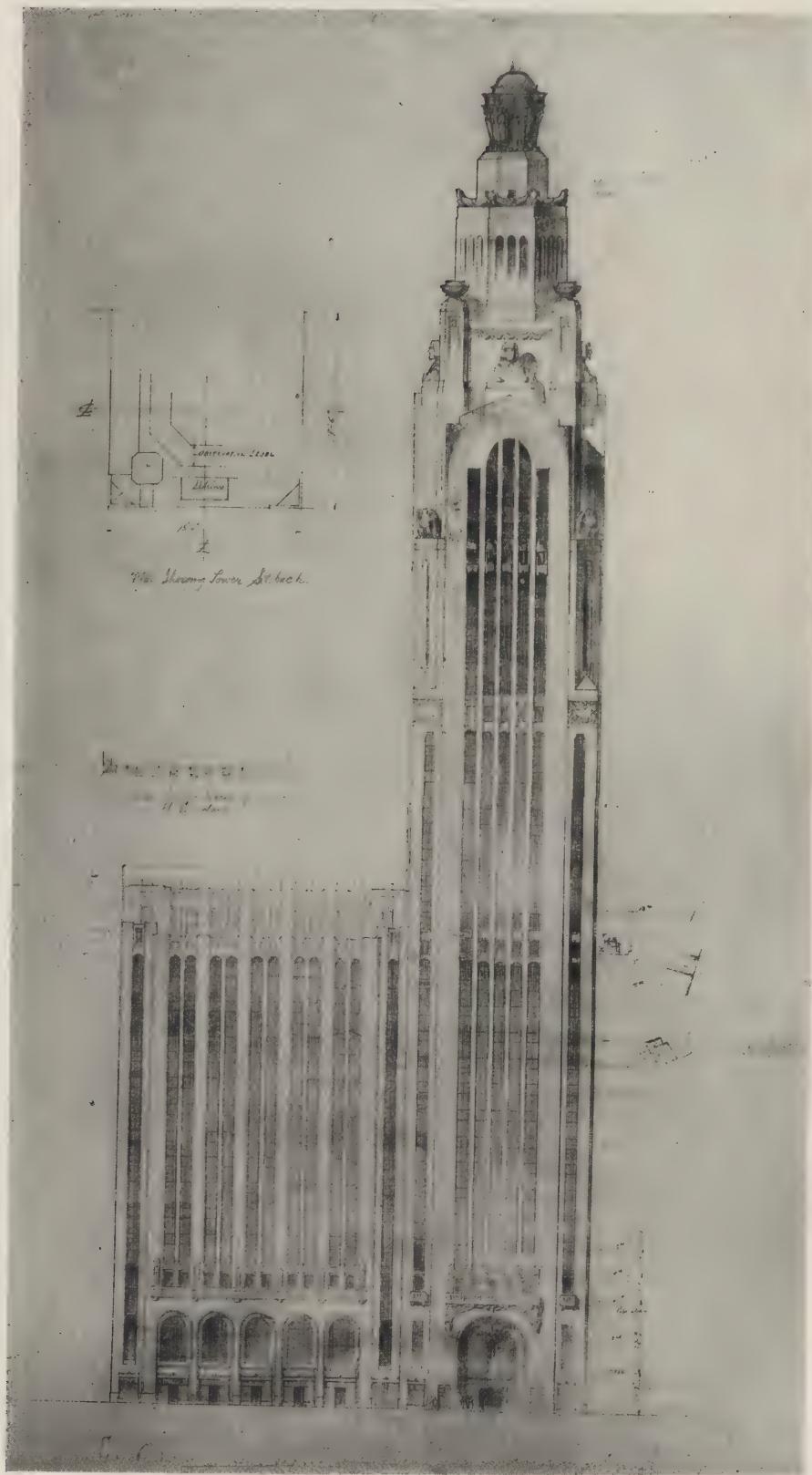


Figure 2. More Developed Study Made Over Figure 1.

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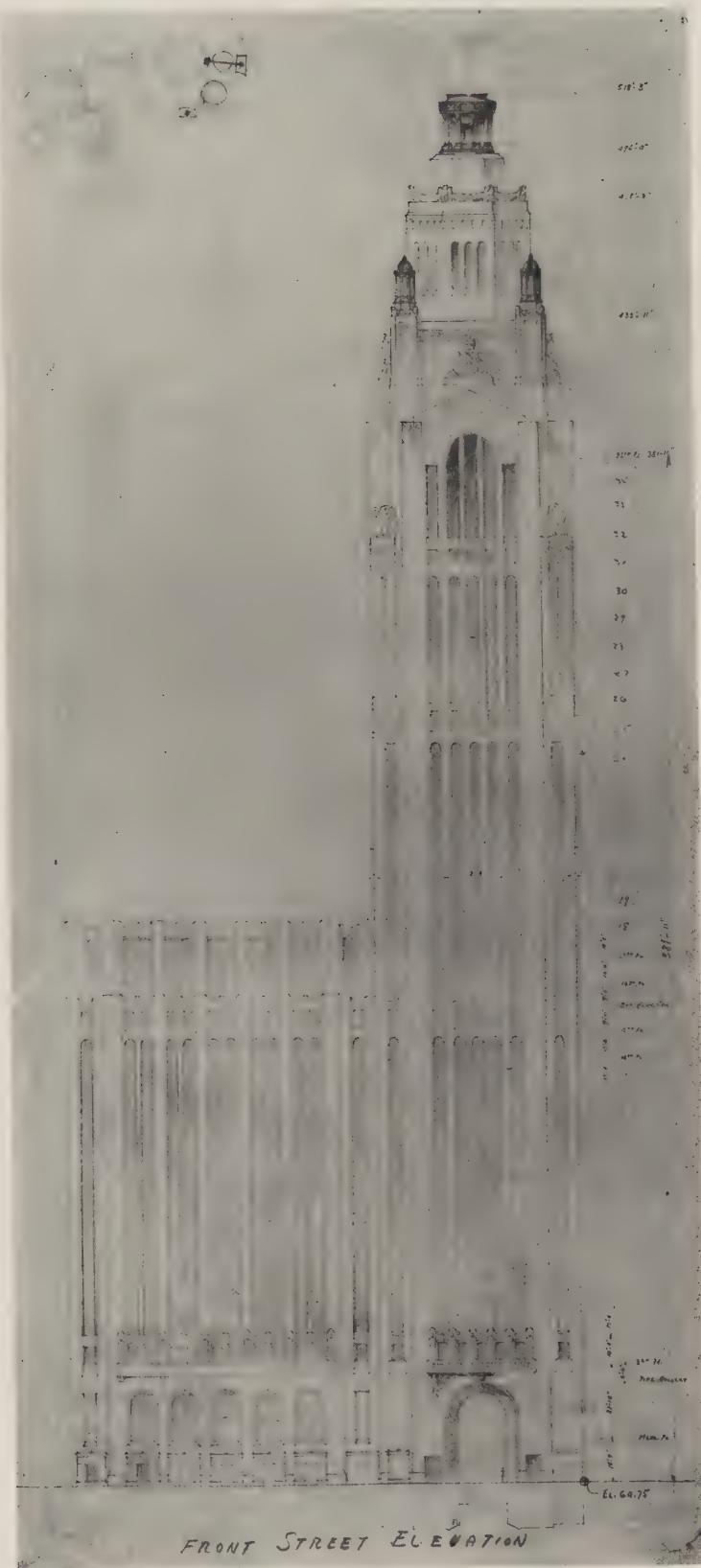


Figure 3. Study Design of the Same Façade as Figures 1 and 2.

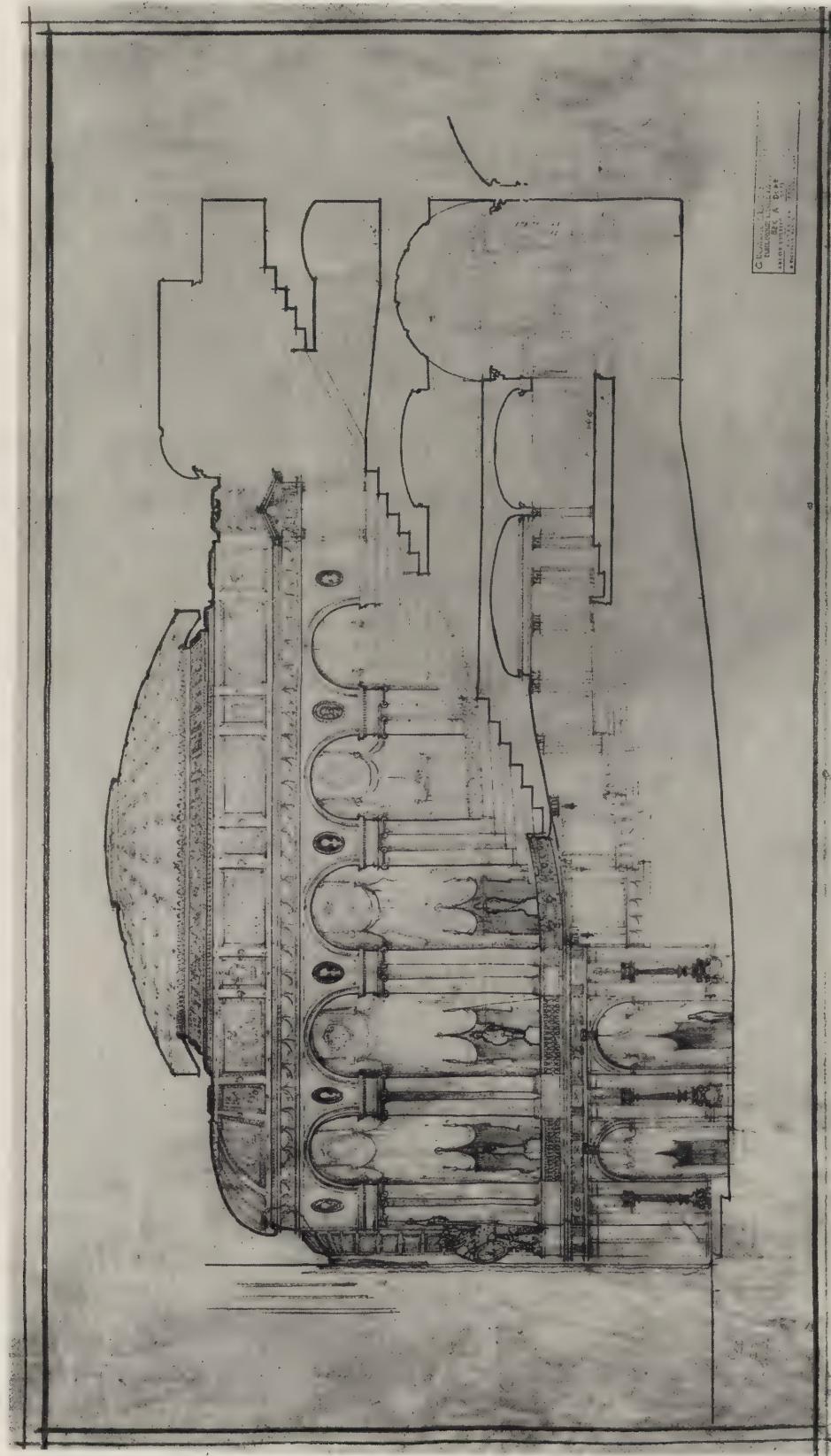


Figure 5. Sketch Study Section of a Theatre. C. Howard Crane, Architect, Elmer George Kiehler, Ben A. Dore, Associates,
Detroit, Michigan.

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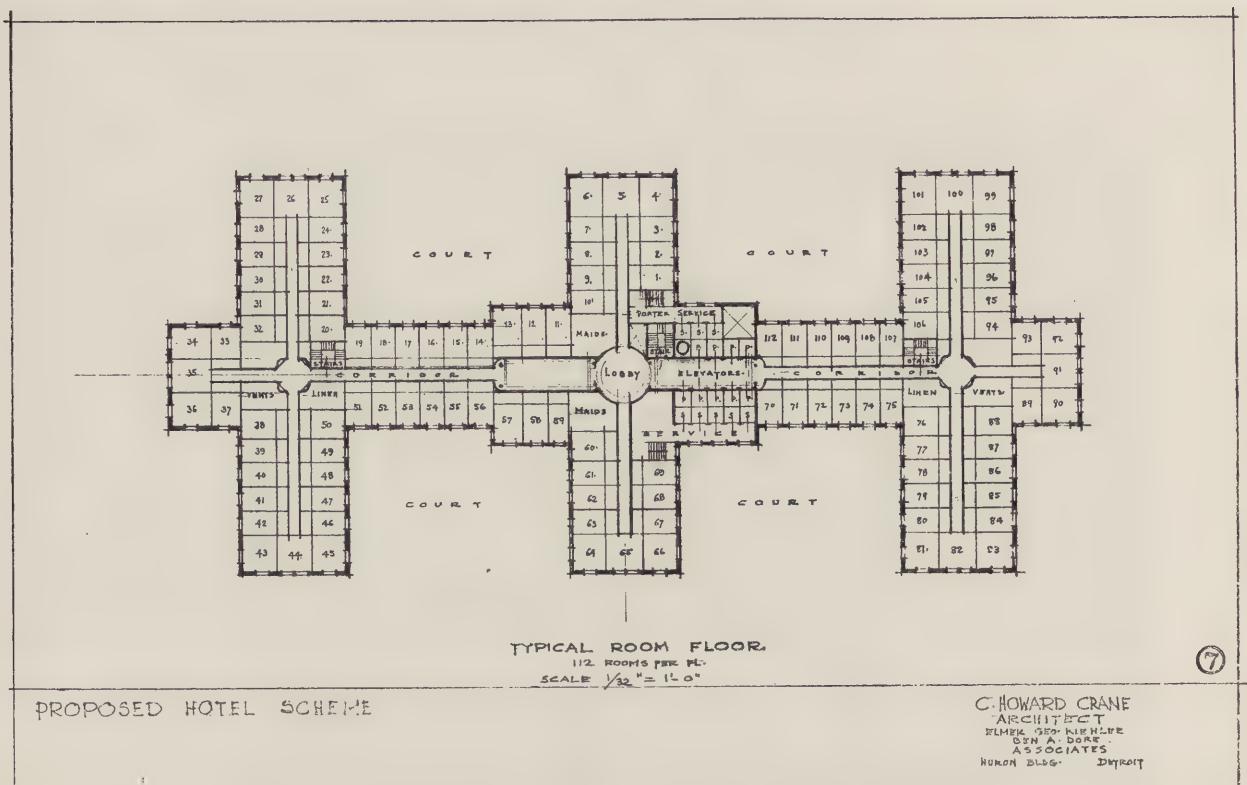


Figure 6. Sketch Study. Typical Plan for a Large Hotel Project. C. Howard Crane, Architect, Elmer G. Kiebler, Ben A. Dore, Associates, Detroit, Michigan.

an intricate work of art, but even simplicity and cleanliness; a well kept walk or simple porch will have an effect of good; well appointed and well arranged streets, parkways and many other cheerful spots will preach sermons.

Such is the work of designers who must be aware of their responsibilities, not only to work for the beauty of the particular creation in hand, but also with the ever important objective embodied in the question, how will it impress and influence those who come in contact with it? The judgment of those who are less schooled in works of art may be of more value than criticisms given by colleagues in the profession, whose trained eyes and architectural education may at times cause superficial judgment and whose individual tastes may call forth unjust opinions. As in all works of good art, comparisons are very difficult—many times impossible; a Chopin waltz cannot be compared with a Brahms' symphony—so, the thoughts and inspirations of characteristically different designers cannot be placed side by side and judged.

In the foregoing words an endeavor has been made to point out how important the work of design in the drafting room is, and it cannot be said too often that the work of the designer is not in making "pretty" drawings from which to erect buildings to please the few who will really understand. But the designer's most important work, his life work, should be to design and build for the benefit of the community at large.

Space will not permit in this article to take up the matter of development study step by step, but the drawings illustrated here were selected from general work in the drafting room. The first three show, to some extent, the result of study and progress towards the final working drawing elevation.

Figure 1 shows a preliminary sketch study of an elevation for a building now being erected in Columbus, Ohio. This drawing is really a development study made for a very interesting perspective that was one of the architect's presentation set. It will be seen that little attention has been given to detail—the masses count, scale of openings and ensemble are well determined. The scale of this drawing and also of the drawing illustrated in Figure 2 was rather large for a building of such magnitude, the several times the value of making the sketch studies scale being one-eighth inch to the foot; this was done, however to enable an early scale model to be made at the same scale. The writer has mentioned at a small scale, of course, proportionate to the size of the work, but as a scale model showing the conception in three dimensions is of such great value in the study of a design, the architects decided very wisely to make these drawings at this scale. It might be added that while the preparation of scale models is perhaps somewhat costly, better results can be arrived at for the unfortunate foreshortening of motifs, skylines, etc., can be avoided by their use, for no matter how carefully studies are made in one

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Figure 4. Study for Mass of Proposed Office Building to Occupy a City Block C. Howard Crane, Architect, Elmer George Kiehler, Ben A. Dore, Associates, Detroit, Mich.

PENCIL POINTS

plane and rendered, the results obtained by the use of a model cannot be approximated without a great deal of labor and cost, for perspectives would have to be made from many viewpoints.

Figure 2 shows a more developed study made over Figure 1. The masses and motifs have taken a more decided form; plans have been taken through the upper part of the tower, windows more clearly defined, the relationship of piers to window openings developed and incidental ornament has been drawn a little more definitely. This drawing may well be termed a progress study. The work at this stage has passed the rough sketch form.

Figure 3 shows a design study of the same facade as shown in Figures 1 and 2. This drawing was made to the scale of one-sixteenth inch to the foot and is really the beginning of the working drawing stage—but is a study.

It may be well to say that for this particular job, the general working plans are to be made to a scale of one-eighth inch to the foot and the working drawing elevations are to be made to a scale of one sixteenth inch to the foot, with necessary larger scale detail drawings showing all different conditions. It will be noted that on the drawing illustrated in Figure 3 (while still in study form) some basic figures have been given. At this stage of the work it is well to establish spandrel sections, pipe galleries, tank floor levels and numerous other practical conditions which must be decided and incorporated on the final drawings. On this drawing some changes are necessary due to development of the scale model, which at this time is under preparation, and criticism of which has been given by the architect and his designers.

Figure 4 shows a very interesting conception sketch of an elevation for a building to occupy an entire city block. The mass and scale count well. The set backs to the heroic tower are well proportioned. The indication of the foreground gives excellent scale to a colossal structure. A drawing of this type perhaps illustrates how a designer must be ready to prepare almost within a few hours notice and turn out something pleasing to look at and yet not allow wild imagination to run amuck. This particular sketch was made in red crayon with the foreground drawn in black.

Figure 5 shows a sketch study section through a theatre which is now being erected in Detroit. The general scheme of interior decoration is indicated; sections through foyers, balconies, ramps, etc., are shown in bold line section indication, vista and sight lines are worked out. All practical conditions have been foreseen, such as the allowances made for structural beams and trusses. This drawing clearly indicates knowledge of theatre construction. While preliminary sketch studies were made at a convenient smaller scale, the drawing illustrated has been drawn up in study form, developed from the suggestion studies so that a working drawing section can be completed easily.

Figure 6 shows a sketch study for a typical plan for a large hotel project. The general arrangement of rooms with their baths has been clearly indicated; service parts, corridors and elevators shown. As the typical floor plan of a hotel is the determining factor of the success of the building, the factor on which window spacing, column centers, etc., have to be determined in accordance with room arrangement, the only way to decide upon a design of this nature is to start with the typical floor plan. The lower stories used for foyers, lobbies, restaurants, writing rooms, etc., will be more or less dependent upon what happens above, but it must be borne in mind that a good plan for the special use for which a building is intended will always allow for good planning of necessary accessory departments. This rule holds for all planning,—*determine and plan for the general purpose first.*

Figure 7 shows a study in sketch perspective of the hotel above mentioned. This sketch is most interestingly presented. The typical floor plan and the purpose of the building can be read clearly in the grouping of wings, roofs, etc. On the lower stories, which cover the entire site, are provided the foyers, lobbies, dining rooms, etc. The drawing is well placed in the picture, shadows and high lights count well, the indication of surrounding buildings and street activities adds life and reality to the sketch. It will be an easy matter to develop the study sketch elevations from this drawing.

No matter how quickly a rough sketch or presentation drawing has to be made, the possibility of its execution must always be kept in mind and the words, "it is good enough," should not be in the vocabulary of a designer or draftsman, for sooner or later a sketch is turned out in a hurry and is "good enough" will be built and the very best possible must be the result.

(To be continued)

ARCHITECTURE IN PICTURES

(Continued from page 47)

mon method of both towards his individual goal. Mr. Long's drawing shows the early influence of Japanese work which he saw at the Chicago Exposition. It was drawn in delicate lines in ink and colored in brilliant hues. Mr. Guerin's notable individuality alone is evident even in this early drawing. The fine sense of composition and thorough understanding of perspective may be due partly to scholastic training but it has left no mark of excess baggage in his technical equipment. A highly decorative as well as extremely simple rendering of a complex, difficult subject results from sheer individual understanding of how much of teaching might be used, and how much dispensed with, in order to truly interpret the things as he saw it. The rendering is on grey paper, made with a few flat blue-grey washes touched up with pencil and the only touch of other color is the yellow-white reflection of the moon in the water.

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PLATE V



STUDY BY GEORGE BELLOWS

On the other side of this page is reproduced a portion of an extremely interesting drawing by George Bellows. The stylization of this study is especially worthy of attention. Note the straight line of the inner side of the figure's right arm which gives the sense of support and accentuates the softness of the curves, note the retirement of the left shoulder and adjacent portions by the indication in light outline only. The hand in the foreground is subordinated by negligent drawing. The stylization has been accomplished by simplification of selected parts and the naturalistic representation of the others. It will be noted that the pencil strokes in the shading on the side of the torso, on the neck and in the hair are vertical, like the inner line of the right arm. This gives the stability and intensifies the tenderness and naturalness of the treatment of the upper portion of the torso upon which the artist has centered his attention. This illustration shows a portion of the drawing, reproduced at the exact size of the original, so that the technique may be studied to advantage. This drawing is in lithographic pencil and is one of several which Mr. Bellows loaned to this journal for reproduction just before his untimely death a few weeks ago. One of these drawings appeared in the January number, others have been engraved and will appear in early issues.

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PLATE VI



ETCHING BY JOHN TAYLOR ARMS, SEGOVIA

The etching by John Taylor Arms reproduced on the other side of this sheet is one of the most interesting of the many etchings Mr. Arms has made. It shows a simple, effective treatment of a complex subject. The composition piles up well and the individual character of the buildings has been retained sufficiently to give interest. It is, altogether, an admirable presentation of an excellent subject.

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PLATE VII



STATUE BY EDWARD McCARTAN, "THE KISS"

A statue, the tenderness and power of which well expresses the mother-love which is its motive, is "The Kiss," by Edward McCartan, a photograph of which is shown on the other side of this sheet. Note the rhythmic composition of lines all in character with the thought. The marble, too, is well chosen, with its fineness and translucence.

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PLATE VIII



PENCIL SKETCH BY EDWARD C. CASWELL, BARCELONA

On the other side of this sheet is reproduced one of a series of pencil sketches made by Edward C. Caswell during his travels in Spain last summer. The technique of this drawing is well worthy of study. The pencil work is free, open and direct.

THE ART OF ROBERT W. CHANLER

THOUGH everyone is acquainted with the characteristic work of Robert Winthrop Chanler in the finished state, very few have ever seen the remarkably vigorous studies which Chanler makes for his designs. Through the courtesy of the artist we are enabled to show in these pages some of these design studies and a number of his mural decorations, painted screens and panels.

The illustration on this page is a photograph of a model that is extremely interesting. It represents the decorations for a tall semi-circular recess in an interior, at a turn in a staircase, as the steps at the bottom of the picture show. In this model Chanler has painted the decorative scheme in a spirited and masterly manner, indicating effectively the composition and the character of the design. While the composition is fanciful and thoroughly decorative there is no loss of true realism, but rather an intensified expression of it. The waterfall and the birds are full of movement and life. Though Robert W. Chanler abhors "realism" in the sense of naturalistic representation, the mere copying of the surface appearance of nature, he is a master of true realism in the presentation of the life and character, the spirit of a subject. The dominant notes of the color scheme are azure and silver. The whole thing is luxuriant and it is vibrant with the mystic beauty of a moonlit tropical fastness, a shrine of nature's god in a veritable paradise.

A study in rhythmic movement and in vibrant "spotting," or tone composition, is the design for a painted screen shown on page 68. The water motive in the background is the right foil for the volute formed by the superposed fish motive, supplying, as it does, the rela-

tively rectilinear and relatively static element needed to accentuate, by contrast, the curves and sense of lively movement in the fish motive. It is well to note how thoroughly the composition of dark and light has been studied, how brilliancy has been obtained by the use of small areas of light in the strongest darks, how the sense of translucence in the water motive has been secured by the use of graded tones—what a thoroughly considered pattern of black and white and grays this design is. Then let us note the expression of character in the drawing of the fish, rakish vicious fighters they are. This design holds the same fascination and has the same strangely quieting effect that one finds in watching the endless evolutions of fish. This is another example of Robert W. Chanler's power of conveying in a thoroughly decorative treatment a more realistic statement of facts than is found in the most naturalistic representations.

In the design for a painted screen, shown on page 66, the pattern of sweeping lines resolves itself into bird forms. One has to look closely at first to make them out in this study, birds of the tropics with plumage of a lightness that gives one an idea what the term "feathery" really can mean. Gorgeous birds, reposeful and of a "smartness" of appearance that might well excite the envy of any woman. And they are drawn in bold free strokes with the sensitiveness, vigor and sureness that one expects to find only in the works of the old Chinese and Japanese masters.

The finished screen painted from this design is shown in the photograph taken during an exhibition at the Kingore Galleries in New York, and reproduced on page 67.

The third study shown here, page 69, is modeled in



Model Showing Study by Robert W. Chanler for the Painted Decoration of Stairway.



Study of Design for a Painted Screen by Robert W. Chanler. See photograph of screen on the opposite page.

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relief, a portion of the design for the plaster ceiling of the swimming pool of the Deering residence at Miami, Florida, a house that attracted wide attention at the time of its completion, about eight years ago, because of its elaborate ornamentation and furnishing and its general costliness. This ceiling by Chanler is one of the best and most interesting features of the house. In this design note again the expression of character of the objects, the admirable way in which the action of the fish has been recorded, in a few sweeping but sensitive strokes of modeling. The marine plants that form the border of the design are represented convincingly. And throughout a sense of the fluidity, transparency and movement of water is conveyed with the most complete simplification in modeled plaster.

In securing the decorative effect he desires and in expressing the character of his subject, in putting over his intention, Chanler disregards the myriad details of the meticulous transcription of nature and overrides conventions. When it

serves his purpose, as it often does, to make his representations of animals and of the human figure "out of drawing" or "inaccurate" as these terms are understood by the anatomist and the naturalist he does not hesitate. He boldly sweeps in his lines, simplifying by losing the things he does not want, that are non-essential and that would only clog the expression of his theme. He emphasizes, sometimes exaggerates, the characteristics upon which he wishes to lay stress. He employs negligent drawing where it serves to subordinate a form to some element or elements of greater importance in his composition. This he does with full intention, for his ability to draw accurately when he chooses to do so is shown by some of his works and is evidenced by the sureness and vibrant expressiveness of the lines of his drawings in general.

Chanler's designs are always organic in that each part takes its place in the whole scheme, performing its function without self-assertiveness. There is always a dominant element to which everything else contributes and there are innumerable minor interrelations, all properly adjusted. He never loses sight of the theme in the treatment of a part, never becomes confused or lost in detail, however complex and intricately interwoven the elements of his design may be.

Though animal, bird and fish motives are used constantly by Chanler and with sympathetic understanding of their life and characteristics, it would be hardly true to say that he finds his inspiration in nature. His works are expressions of life and philosophic observations that spring from within the artist's being. It would be closer to the truth to say that the natural subjects; such as the swimming fish, the struggling marine creatures, the nervously active squirrels shown in certain of his designs, may be regarded as the excitants of his powers, the things that stir

him to expression, rather than as his sources of inspiration. Thus, in one of his designs he expresses his realization of the awesome force and universality of life, of man's kinship with all things that live, by representing life in an elemental stage where these things stand forth with gripping power in the blind, slow struggle of deep sea creatures in his "Battaile Sou Marine." This painting is not illustrated here for the reason that showing it in black-and-white would not convey a correct impression. An excellent reproduction of this screen in full color, as well as fine color plates of other designs, may be seen in the de luxe monograph of Chanler's work published by William Helburn, New York.

The quick nervous activity of squirrels is the theme of the screen design shown on page 74. Here



Screen by Robert W. Chanler. See design study for this screen on the opposite page.

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Study of a Design for a Painted Screen by Robert W. Chanler.

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instead of using a background of contrasting character, as in the fish design described, the artist has reinforced his expression by marking the background with lines that suggest nervous, alert activity, lines that change their curves and direction suddenly, and in an apparently erratic way.

When Chanler paints the nude human figure, as he has done in the case of the screen on page 75, he gives the flesh luminosity and tenderness, he seems not to be conscious of the surface or the structure of the body, but to see the person as a vibrant, nebulous entity. In securing this effect he also obtains a surface that gives an appearance of age, without any effort to "antique" his painting.

Nature's creatures seem to interest Chanler not primarily as birds and fish, animals and human beings, but as manifestations of life in varied forms. He is close to Nature, not as a student, but by virtue of his own naturalness, his freedom from artificiality. Observing, living and thinking along his own paths, he has independently developed a broad pan-theistic philosophy which finds expres-

sion in his work. It is the basis of all his designs, of his squirrel screen, his fish and his bird designs, as well as his "Dance of Death." Sometimes he records wierd fancies, as in his "Nightmare" shown on page 73 and in the design of the screen on the same page.

In answer to a question about his method of working, he recently said to the writer that he starts with a hunch, finds a rhythm and works it out. And, it may be said that the working out is thoroughly studied. He never spares himself labor in carrying a thing through.

Chanler is big of stature, massive and robust. He vigorously denounces superficiality and stupid conventions, and he talks interestingly of life and art, the expression of his eyes by turns keenly penetrating and deeply reflective. He is a forceful man, with a most varied, but well-ordered fund of knowledge and opinions. Chanler stands out from the ranks because he is natural and has the courage of his convictions.

E. C.



Plaster Model for Modelled Ceiling by Robert W. Chanler for Swimming Pool in the Deering Residence at Miami, Fla.

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Painting by Robert W. Chanler, "Giraffes," in the Luxembourg Galleries, Paris.

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Interior of Colony Club, New York.



Detail of painted Ceiling in Colony Club, by Robert W. Chanler.

Painted Screen by Robert W. Chandler.





Painting by Robert W. Chanler, "Nightmare."



Painting by Robert W. Chanler.



"*The Dance of Death*" by Robert W. Chanler.



Painted Screen by Robert W. Chanler



Screen by Robert W. Chanler.

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AN INTERESTING COMPETITION OPEN

THE AMERICAN INSTITUTE OF ARCHITECTS has announced a competition of international interest to draftsmen. Entry, of course, is free and additional copies of the program may be had on application to the Octagon House, Washington, D. C. Here is the complete program:

A COMPETITION
AN HISTORICAL DEVICE
FOR
THE OCTAGON HOUSE OF THE A. I. A.
WASHINGTON, D. C.

Eligible to compete—any architectural draftsman.
Date for submission—before April 1st, 1925.
Drawing required—one sheet scale 3"=1 foot.
Prizes—1st \$100.00
2nd 50.00
3rd, 4th, 5th, 6th and 7th, 10.00 each
and honorable mentions.

FOREWORD

The Octagon House, the Washington, D. C. headquarters of the American Institute of Architects, is a building of great historical and architectural interest. It is, however, so located that the passerby oftentimes does not see the old mansion or realize the interest which it possesses.

It has been suggested that it would be well to place in suitable relationship to the building and the two streets on which it faces, an appropriate device combining the elements of beauty, dignity and durability, which will call attention to the building and will furnish information to all interested in the architecture and history of the country.

In order to secure a design for such a device, the Building Committee of the American Institute of Architects hereby institutes a competition open to all draftsmen and will award prizes to the designs adjudged worthy under the terms of the program for this competition as set forth hereinafter. Each competitor is privileged to associate with himself a sculptor, metal worker, writer, and/or any other artist or craftsman.

Competition designs may be submitted anonymously any time before April 1st, 1925, and without previous notice.

HISTORY OF THE OCTAGON HOUSE

The following outline of the story of The Octagon House will serve as a background for this competition:

The Octagon House, an exemplar of the fine mansions of the period, was built in Washington on the advice of General Washington by his friend Col. John Tayloe of

Virginia. The house was designed by Architect Wm. Thornton (1761-1828) who was the successful competitor for the United States Capitol and who at Jefferson's request made designs for the University of Virginia. The house was erected 1798-1800, and became renowned for its hospitable entertainment of persons of distinction. Thornton 1794-1802 was one of three commissioners of the District of Columbia and had charge of executing the plan of the city of Washington. From 1802 to 1828 he was Superintendent of Patents. His memory is respected by the profession for his meritorious and refined work on the U. S. Capitol and for his share of early work done in laying out the city.

In 1814 when the British burned the White House, President James Madison occupied the Octagon House, and there Dolly Madison dispensed the hospitality of the Executive Mansion. There was signed the Treaty of Ghent which ended the War of 1812. The Institute possesses the treaty table which stands in the circular room where the ceremony occurred.

The building is of such interest and beauty that a monograph of it has been published. One of the plaster cornices has been reproduced in the new American Wing of the Metropolitan Museum.

It was Chas. F. McKim who discovered the Octagon House as a home for the Institute. With the active and generous help of Cass Gilbert and other leaders of the profession, the property was purchased from the heirs of Col. John Tayloe and since that date, namely, 1902, the Octagon House has been the national headquarters of the American Institute of Architects.

PROGRAM OF COMPETITION

The device may be designed of wood or metal or stone, or a combination thereof. The device may be hung from the building, or attached to the walls thereof, or placed on the balustrade surrounding the areaways, or supported free from the building on the ground, or on a pier or posts.

In the case of a design requiring support, the supporting pier, posts or brackets should form part of the design.

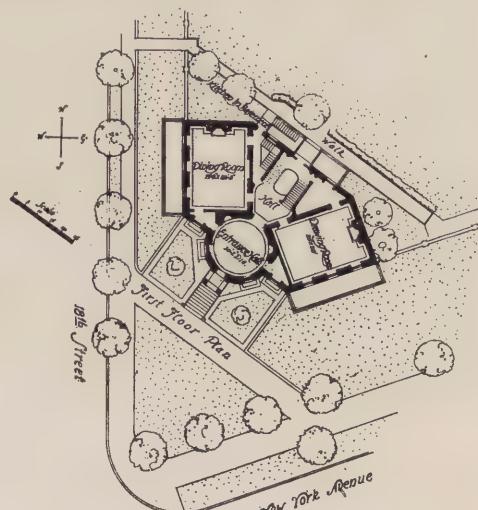
Factors which will be considered by the Jury in making awards are,—

- (1) Beauty and appropriateness of design and suitability of material.
- (2) Inscription, selection of facts and their wording and presentation.
- (3) Taste and judgment exercised in size, placement, and legibility viewed from the sidewalk or street.

The length and composition and character of the inscriptions to be placed on the device are left to the discretion of the competitors, as also the type of lettering used and the question of the desirability of using symbols such as, or other than, the seals below mentioned.

In view of the history of The Octagon House and its present occupancy, the competitors may at discretion include in their designs the seal of the United States and the seal of the American Institute of Architects.

The drawings, which shall not exceed 24" x 36" in



First Floor Plan of the Octagon House

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The Octagon House, Dr. Wm. Thornton, Architect, 1761-1828.

The National Headquarters of the American Institute of Architects, Washington, D. C.

size, should show the design at 3" to the foot in direct elevation, sections or perspective sketches at any scale being included if desired by the competitor. Drawings shall be on white paper in any rendering. Drawings shall be delivered to D. Everett Waid, president of the American Institute of Architects, One Madison Avenue, New York City, on or before April 1st, 1925.

All drawings shall be sent flat and with each shall be enclosed in a plain opaque sealed envelope without any superscription or mark of any kind, the name and address of the competitor. These envelopes shall be opened by the Chairman of the Building Committee after the final award has been made.

Prize winning designs will be exhibited in the Exposition of Architecture and Allied Arts at the Grand Central Palace, New York, April 20th to May 2nd, 1925.

The Building Committee shall have the option of using any design or suggestion presented in this competition for the expressed purpose of the competition and upon according due credit to the authors.

The drawings submitted will be judged by the Building Committee of the American Institute of Architects, who will award the prizes in order of rank determined by them. They may in their discretion award also honorable mentions.

To the best design will be awarded a prize of \$100.00, to the second best \$50.00, and to the next five ranking designs \$10.00 each.

Signed, THE BUILDING COMMITTEE

Frederick L. Ackerman	Fiske Kimball
William P. Barney	Robert D. Kohn
Edwin Bergstrom	C. J. Lorehn
Glenn Brown	E. P. Mellon
D. H. Burnham	Charles A. Platt
J. E. R. Carpenter	Howard Vandoren Shaw
E. W. Donn, Jr.	A. H. Stem
Albert Kahn	Seth J. Temple
William M. Kendall	A. M. Welch
D. Everett Waid	Chairman

THE BEAUX ARTS BALL.

ANYTHING TO BEAT BARNUM is the slogan of the Executive Committee of the Beaux-Arts Ball, to be held on the night of February 5th, in the grand ballroom suite of the Hotel Astor. The proceeds will be used by the members of the Society of Beaux-Arts Architects to aid struggling students in their endeavors to obtain an education in painting, sculpture or architecture.

It is planned to have *Un Cirque d'Hiver* which, according to the outlook, will go down in history as one of the most artistic efforts of the society. One of its features will be a gorgeous circus parade and spectacle which is being devised by Kenneth Murchison in combination with a former group of instructors at the Beaux-Arts Institute of Design. They are headed by Elie Nadelman and are designing elaborate band wagons, animal cages, grotesque masques and other equipment such as has never been witnessed here or in ancient Rome.

John Held, Junior, designed the cover of the invitations and Willy Pogany painted the cover for the programs. Many well-known artists are interested in the ball, and the Committee of the Ball consists of: Kenneth M. Murchison, Chairman, Donn Barber, Robert W. Chanler, F. Burnham Chapman, George S. Chappell, Frank Crowninshield, Henry B. Culver, Bradley Delehanty, C. B. Falls, Howard Greenley, Ben Ali Haggan, John Held, Jr., J. Monroe Hewlett, Raymond M. Hood, John Mead Howells, Harry Allan Jacobs, Leo Lentelli, Francis Lenyon Gari Melchers, Benjamin W. Morris, James W. O'Connor, Ernest Peixotto, Edward F. Sanford, Jr., John E. Sheridan, Ferrucio Vitale, S. Oakley Vander Poel, A. Stewart Walker and Arthur Ware.

DENNISON & HIRONS ANNUAL DINNER

THE annual dinner of the office of Dennison & Hirons was held at Mori's Restaurant in New York on December 29th. About thirty members of the "force" were present and the evening was marked with song, noise and atelier jokes traditionally appropriate to such gatherings.

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STUDIOS, N.Y.

Planning the Architectural and Allied Arts Exposition to be held April 20 to May 2 at the Grand Central Palace, New York. Left to right, sitting: Harvey W. Corbett, President Architectural League of New York; D. Everett Waid, President A.I.A.; B. W. Morris, President New York Chapter A.I.A. Standing, left, Howard Greenley, Director Decorations; right, Charles H. Green, Exposition Manager.

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THE ARCHITECTURAL EXPOSITION

THE preparations are rapidly going forward for the Architectural and Allied Arts Exposition to be held at the Grand Central Palace, New York, April 20—May 2. This exposition is under the auspices of the American Institute of Architects and the Architectural League of New York. It will embrace a comprehensive presentation of architecture, sculpture, arts and crafts, decorative materials, building materials and equipment. D. Everett Waid, president of the American Institute of Architects and Harvey Wiley Corbett, President of the Architectural League of New York are respectively, Chairman of the General Committee and Chairman of the Exhibition Committee and they are putting the most enthusiastic effort into the work of creating the Architectural Exposition in collaboration with B. W. Morris, President of the New York Chapter of the A. I. A.; Howard Greenley, Director of Decorations, Charles H. Green, Exposition Manager and the members of committees who are giving their best effort to this work.

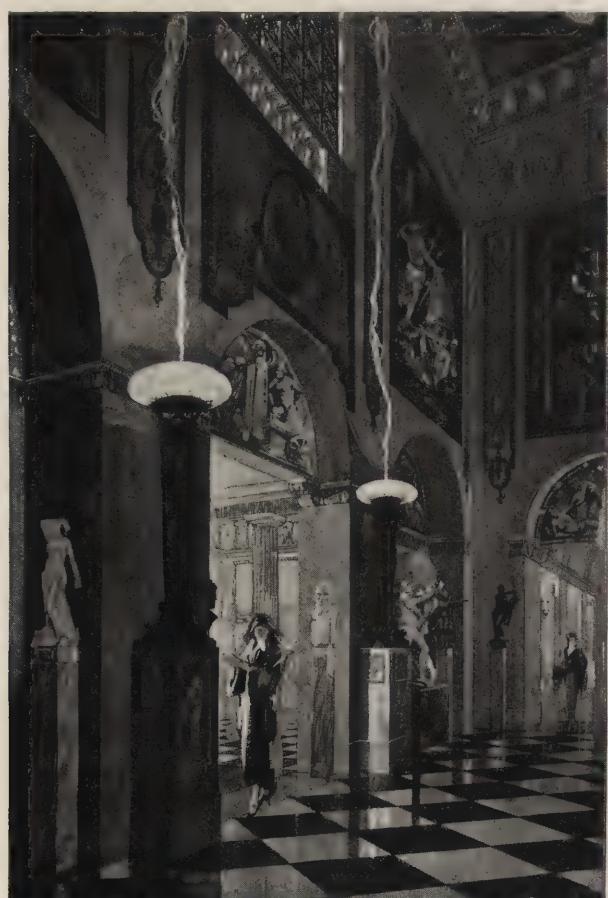
On the opposite page is shown an interesting group picture of some of the men most active in planning and carrying out this exposition and on this page are shown two of Mr. Greenley's designs for the architectural treatment of the Exposition.

UNIVERSITY OF LOUISVILLE

THE University Archi-Arts Society of the University of Louisville has spent the last several months in cleaning up the tedious work of organizing. As our first and most important business, we formed and adopted a constitution. Another thing that the club did was to institute a committee to look after the books and the drawing room of the club. In order to carry out the purpose of the club—to boost the study of architecture and the allied arts—we have established a sketch competition. The competition will be carried on between the members of the club and a judgment will be held semi-annually, at which time awards will be given to the winners. We wish all the other clubs success and progress for the year.



*South Aisle, Howard Greenley, Architect.
Architectural and Allied Arts Exposition.*



*Detail of Court of Honor, Howard Greenley, Architect.
Architectural and Allied Arts Exposition.*

AN OPPORTUNITY

THERE is an opportunity for architects who are well trained in design and practical, or who are willing to become practical, also for architects who are practical and who are willing to strive to turn out creditable designs, in designing the common buildings, the kind that many architects disdain, even though in need of more work. These buildings, apartment houses, stores, small motion picture theatres, etc., are being built all the time in all parts of the country and plans must be drawn for them by someone and that someone gets paid for his work. The architect who sits by and lets this work all slide past, unless he has a practice that enables him to do so safely, is not wise.

Too many architects feel that this kind of building is beneath their dignity and that it does not afford any opportunity for good work. But, however severe the practical and financial conditions of the work may be, it pays better, usually than the little "high class" work some men get, and it is good discipline. There is no reason why the resulting building should not be creditable if the architect's ability to design is genuine and he does not attempt to use too much "architecture," keeps the design simple and straightforward and resists the temptation to be either "arty" or monumental. The man who draws plans for such a building must make a practical, economical building, must get his drawings done promptly and get the building done expeditiously, it is a regular everyday matter. Some men of good experience have done well in this field and there is room for many others. It is part of the architect's own field that is occupied largely by others because he neglects it.

ATELIER HIRONS TRAVELLING EXHIBITION

MR. Richard Banks Thomas reports that he has had a fine response from all over the country in answer to the announcement in the January PENCIL POINTS that he was arranging an itinerary for a collection of Paris Prize drawings. There is still room on the schedule for two or three more schools in the middle west and Mr. Thomas would be glad to hear from western schools that would be interested in showing the drawings. Address him at 342 East 41st St., New York.

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GEORGE W. BELLOWS

GEORGE WESLEY BELLOWS died on January 8th at the Post-Graduate Hospital of acute appendicitis, after a week's illness. Mr. Bellows was born in Columbus, Ohio, in 1882 and was educated at the Ohio State University, later studying art with Robert Henri in New York. He is survived by his wife formerly Miss Emma L. Story, to whom he was married in 1910, and by two daughters, Anna and Jean, thirteen years and nine years of age respectively.

George Bellows' work made him a leader of the younger generation of painters. His work was seen constantly in exhibitions not only in New York but in the European art centres and he won many prizes.

Paintings by George Bellows are in the Metropolitan Museum of Art, the Pennsylvania Academy, Philadelphia, the Chicago Art Institute and in art galleries in many other cities.

He was an instructor in the Art Students League in 1910, 1918 and 1919 and at the Chicago Art Institute in 1919. He was a member of many art societies and several clubs.

That George Bellows has passed on is a distinct loss to American art for his was a strong independent spirit and he was constantly developing.

SCARAB CONVENTION

SCARAB, entering only her 16th year of existence, finds her accomplishments increasing more rapidly than her years. For it was only a few years ago when she had hoped to promote a national competition, and at the recent annual convention held at Champaign, Illinois, drawings of the Second National Competition were exhibited, the results being most creditable to any competition which could be held for architectural students in the country. The jury of award was headed by A. Corrubia of St. Louis, whose report gave the Annual Scarab Medal to Victor Kunz, '26, of Washington University.

Today this competition is young, but creditable; tomorrow it will rank among the leading Traveling Fellowships of the United States, as the promotion of higher

architectural education is its ultimate aim and desire. The competition is open, generally, to junior and senior students of the schools where a Temple of Scarab exists. It is highly desired that non-Scarab participate and compete.

Furthermore, Scarab offers each year fifty dollars to the Beaux Arts Institute of Design to serve as a prize, to be known as the Scarab Prize.

And foremost among her accomplishments is the conducting of a Traveling Sketch Exhibition. For the past two years this traveling sketch exhibition has been one of the best in the United States. The variety of sketches is plentiful as well as the diversity of mediums—water color, oil, pen and ink, crayon, pencil and pastel. The exhibition is being conducted again this year, being on the road from January until June. It is an annual affair.

The close of the business session of the Champaign Convention found Scarab headed by these officers for the ensuing year:

Edwin E. Valentine, architect of Muskegon, Mich., reelected Most Worthy Hiero Sphinx.

Harry R. Gamble of New York, reelected Most Worthy Hiero Papirus.

George Wright, assistant supervising architect of the University of Illinois, Most Worthy Hiero Monarch.

Through the work of these personalities, Scarab can look for still greater accomplishments in the promotion of a fraternal and cooperative spirit in the architectural world, and in the training of the men of that field.

NEW YORK ARCHITECTURAL CLUB

ARCHITECTURAL BOWLING LEAGUE DIVISION

THURSDAY, January 8th, the first Ladies' Night of the season, was indeed a brilliant success. One hundred and ten couples attended a dinner dance at the Pershing Square Savarin until eight o'clock, after which they adjourned to the New York Hippodrome where arrangements had previously been made for a block of seats in the orchestra. The enjoyment of the evening was further heightened by some of the head-liners on the bill who indulged in a few pleasantries about the League, but the Wampus Cat in Aesop's Fables who made the strikes using Penguin for ten pins was the outstanding feature of the show.

The two burning questions which have since confronted us are, "How far up the river is a bridge?" and, "If the river has only one side how will we know when we get across?" Handsome prizes will be awarded for the best answers turned in before January 1st, 1999.

Tuesday, January 13th, saw our all star team go down to defeat before the Detroit Architectural Bowling League. This makes us even, as we won the first series last month by capturing two out of three games while Detroit carried off the honors in the second series by the same margin. A through telegraph wire from our alleys in the Hotel Shelton, New York, to the Recreation Building, Detroit, with a Morse operator at each end was the means of transmitting the scores. Many personal messages and greetings were exchanged between plays, which not only added to the interest of the tournament but showed the great possibility of an inter-state movement of architectural clubs to really get together. Scores were as follows:

	First Game		
	New York	Detroit	
Healy	193	Krecke	213
Miltenberger	159	Kern	163
Ackerman	189	Carmichael	130
Zerfass	120	McGrath	147
King	160	Kalsched	137
	821		790
	Second Game		
	New York	Detroit	
Healy	188	Krecke	200
Miltenberger	159	Kern	194
Zerfass	168	Carmichael	194
Ackerman	181	McGrath	147
King	156	Kalsched	184
	852		919

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Third Game

New York		Detroit	
Healy	135	Krecke	147
Miltenberger	169	Kern	192
Zerfass	185	Carmichael	179
King	140	McGrath	161
Ackerman	167	Kalsched	130
	796		859

Three or four teams in the League have become short-handed through a natural cause, unavoidable in our profession, namely men laid off for lack of work in their respective offices. In several instances these men have joined offices already having teams in the league which of course prevents them from rolling on their old teams and leaves vacancies. These vacancies can be filled by architectural men who are employed in architects' offices not now represented in the League.

Any such men who are anxious to bowl can be assigned by writing to or telephoning Mr. Emile L. Capel, care Alfred C. Bossom, 680 Fifth Avenue, New York.

N. T. VALENTINE, *Secretary,*
Hotel Shelton, New York

DONALD NELSON.

DONALD S. NELSON, winner of one of the scholarships offered by the Massachusetts Institute of Technology, entered the competition through the Atelier Parsons of The Architectural Sketch Club of Chicago. Mr. Nelson hails from Chicago where he was born in 1904 and attended grammar school and later attended the Nicholas Senn High School from which he was graduated and became a member of the Atelier Parsons of The Architectural Sketch Club of Chicago. While in the Atelier he was actively engaged in completing charette after charette and he soon earned the honor of having received the highest number of points in one year of any of its members.

For the past three years Donald has been in the office of Granger, Lowe & Bollenbacher. Previous to this time he had been in the employ of Ludgin and Leviton for about eight months. Donald feels greatly indebted to his patron, Mr. Wm. E. Parsons, and to Mr. Alfred E. Granger for their influence, guidance and instructive criticism.



Donald S. Nelson



LOUIS PIROLA.

LOUIS Pirola, one of the winners of the Massachusetts Institute of Technology, was born in Chicago, Illinois, in 1902.

His preliminary education was received in the public schools of this city.

After graduating from the Lane Technical High School in February, 1921, he entered the employ of W. W. Ahlschlager, where he remained for six months; then in the office of Arthur Foster, F. I. Ellert and M. R. Sandel where he remained two and one-half years.

These offices he left to become employed in the offices of David Adler and Robert Work, Inc., where he remained up until his departure for the east.

During this time he devoted his evenings to the furtherance of his study of Architecture and he became an active member of the Atelier Parsons, of The Architectural Sketch Club of Chicago (formerly the Chicago Architectural Club).

Last Spring he entered, as one of the representatives of the Atelier Parsons, an open competition for the scholarship of the Massachusetts Institute of Technology with the result that he was one of the successful winners of the award.

Mr. Pirola feels that he owes much to his patron, Mr. Wm. E. Parsons, for the sincere and competent guidance which has enabled him to succeed.

THE ARCHITECTURAL SKETCH CLUB (Formerly *The Chicago Architectural Club*)

WITH great gobs of enthusiasm and activity the Architectural Sketch Club of Chicago (formerly *The Chicago Architectural Club*) has entered upon what promises to be one of its most active years.

To begin with the Atelier, under the able guidance of our friend and patron, Mr. Parsons, has been steadily forging to the front with the result that two of its junior members, Donald Nelson and Louis Pirola were the successful competitors for the scholarship offered by the Massachusetts Institute of Technology, where they are now busily engaged in soaking up an architectural education as representatives of the Club.

The results of the summer problem of the Beaux-Arts Institute of Design were also greeted with great enthusiasm. Three of our members received First Mention Place and

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all their drawings held for publication in *The American Architect*. The following men were the honored ones: Fred Ahlson and Donald Nelson in the Class B Projects and Leslie Greenwald in the Analytiques. The boys are all on their toes now and hard at it, with all indications of greater results in the near future.

The Atelier is also feverishly engaged in completing all preparations for the live models which will soon grace our rooms as the life class gets under way. Our veteran Atelier man and fellow club member, Robert Dando, is acting as sponsor for the class this year and he reports great enthusiasm among the pencil pushers who have signed up for "life."

Mr. G. Broes Van Dort, one of the original charter members of the Club and a most enthusiastic supporter of its activities, contributed his annual prize of \$50.00 for a ten hour sketch problem which was held at the Club rooms, 40 So. Clark Street on Saturday, Nov. 29th, at 2:00 P.M.

The Subject of the Problem was the design of A MEMORIAL TABLET placed in the foyer of the Art Institute of a large city to commemorate a great man, a patron of Art who devoted much of his time to the founding and developing of the Museum.

The following men submitted solutions; Messrs Ryan, Herter, Ahlson, Carlborg, Rupinski, Dando, Schweicker, Walden, and Brown.

Mr. Andrew Rebori officiated as judge and Mr. Herter was awarded first prize. Messrs Ryan, Ahlson and Carlborg received first mentions.

Under the auspices of our two sterling entertainers, Messrs. Paul McGrath and Jos. Lindquist, the club held its first party of the year on Dec. 5, and if success can be interpreted by numbers, they attained it, for some seventy-five members turned out for the affair. After partaking of a delightful dinner, the boys were given a real treat in the form of some talented feminine pulchritude. Real girlies that danced and girlies that sang.

A very interesting excursion was made to the plant of the Northwestern Terra Cotta Company on December 21, by members of the Club as guests of the Company. Upon their arrival at the plant the guests were conducted through it, where they learned many very interesting things pertaining to the modeling and manufacture of Terra Cotta. Following this they were all treated to some very delicious refreshments by their fellow club member and most gracious host Mr. Chas. H. Sierks, who is to be commended for his hearty cooperation with Wm. Sponholz, Chairman of the Educational Committee of the Club.

Ferdinand Eiseman, the envoy of the 1924 Foreign Traveling Scholarship, has arrived in Rome and as we surmise from his letters is enjoying his stay immensely amid the ruined splendors of that great Italian city, which is preparing for the celebration of "Jubilee Year."

Doubtless a great many of our friends among the PENCIL POINTS readers will be greatly surprised and interested in the change of name of our organization as evidence at the head of this article. However, after Feb. 1st, "The Chicago Architectural Club" will assume its original character name of "The Architectural Sketch Club of Chicago."

Due to the efforts of the other two architectural organizations in this city, namely the American Institute of Architects and the Illinois Society of Architects, a long cherished idea of the three organizations is to be realized at last, namely to have them all housed under one roof.

The first step in this direction was the formation of an organization which would embody the three organizations whose membership would be made up largely of the members of the three organizations. The new organization is to be known as "The Architects' Club." In order to avoid confusion which would arise from the similarity of names, the Chicago Architectural Club has agreed to assume the name of "The Architectural Sketch Club of Chicago," the original name under which it was incorporated.

The club's first move was the purchase of the historic W. W. Kimball residence at the southeast corner of Prairie Av. and Eighteenth St., 85 x 150, for \$82,500. This purchase was made as a part of the agreement between the organizations and John J. Glessner in connection with the recent gift of his home at the south-west corner of Prairie and Eighteenth, directly across the street, to the American Institute of Architects, subject to a life interest by the donor.

Ownership of the former Kimball residence will be vested in the Architects' Trust, comprising Charles E. Fox, Alfred Granger and Andrew Lanquist, appointed to hold title for the club. Financing of the purchase and cost of rehabilita-

tion has been carried out through the sale of 100 proprietary memberships of \$1,000 each. Holders of these memberships pay no initiation fee, but are subject to the regular annual dues of \$50. These memberships, however, are similar to bonds, the owners receiving annual dividends of 7 per cent. The dividends are made available through funds received from leasing the residence back to the architectural societies. While tradesmen and professional men other than architects are permitted to become proprietary members, 80 per cent of this class must be architects. Practically every large architectural firm in the city is represented in its membership; and some by two or three individuals. Regular memberships in the club may be obtained at a cost of \$100 for initiation fees, with annual dues of \$50.

Charles E. Fox has been elected president of the Architects' Club, Alfred Granger, first vice-president; Andrew Lanquist, second vice-president; Pierre Blouke, secretary, and F. E. Davidson, treasurer. The officers, together with Richard E. Schmidt, George C. Nimmons, J. C. Llewelyn, Clarence W. Farrier and George Nedved, will comprise the directors.

The club has already taken over the Kimball residence, which has of late been used as a rooming house, and has a caretaker in charge. Extensive alterations will be made, after which the three societies—the Chicago Chapter of the Illinois Society, Chicago Chapter of the American Institute of Architects, and The Architectural Sketch Club of Chicago, will occupy it jointly with the new Architects' Club about March 1.

One of the impelling motives of the organization has been the desire to foster the education of the future architects, the younger generation now making a study of this profession, according to President Fox. "With this in mind," said Mr. Fox, "we are converting the garage in the rear of the residence into an atelier, with especial attention given to the needs of the Architectural Sketch Club.

"We also have in mind the ultimate accumulation of a technical library covering all phases of the building industry so that we may offer our facilities to those seeking information along any of these lines. Then, too, the galleries of all the societies will be removed to the new club.

"We are not forgetting the social phase, either. There will be a few guest rooms and we may even have a dining room in connection with the club where we will serve the members regularly. And of course all the usual facilities will be provided for the convenience of our members."

A membership campaign was launched at a luncheon at the Auditorium Hotel Friday noon, Jan. 9, at which time plans for the development of the organization were discussed. Richard E. Schmidt was appointed chairman of the campaign committee.

PERSONALS

G. MEREDITH MUSICK, ARCHITECT, has removed his offices to 516-18 Foster Bldg., Denver, Col.

JOHN E. LOFTFIELD, ARCHITECT, has opened an office at 618 Exchange Bank Bldg., St. Paul, Minn. The former partnership under the firm name of Harris & Loftfield has been dissolved.

PARKE T. BURROWS will retire from the firm of Temple and Burrows, Architects. The practice will be carried on under the name of Seth J. Temple, Architect, 730 Union-Davenport Bldg., Davenport, Iowa.

MERKLE & ELBERTH, ARCHITECTS, have removed their offices to 516 Fifth Avenue, New York.

WATERS & WILKES, ARCHITECTS, have removed their offices to 96 Bloor Street, West, Toronto, Canada.

COOK & LACY, ARCHITECTS, Wilkes Barre, Pa., have dissolved partnership. Horace G. Cook, Jr., will continue to practice at 716 Miners Bank Building. L. V. Lacy will take charge of building construction for A. J. Sordoni, 45 Owen St., Forty Fort, Pa.

MYERS AND COFFIN, ARCHITECTS, have dissolved partnership. Clarence T. Myers will continue to practice at 412 Pennway Bldg., Indianapolis, Ind. Kenneth D. Coffin has removed his offices to 424 Board of Trade Building, Indianapolis, Ind.

FRANZ C. WARNER, ARCHITECT, has removed his offices to 506-510 Bulkley Bldg., Cleveland, Ohio.

C. R. KNIGHT has been appointed Professor of Architecture at Auckland University, Auckland, New Zealand, and will take up his new duties there in March. Mr. Knight has spent the greater part of the past two years in the United States in the office of Aymar Embury II.

"SELLING" ARCHITECTURE

Editor: PENCIL POINTS,
Dear Sir:

It is with extreme interest that I have read the various letters grouped under the heading "Selling Architecture" in this month's issue.

The majority of these favor a systematic campaign of advertising, propaganda or publicity of an educational nature informing the public just what "architecture" is and what the architect does—his importance and usefulness and that employing an architect is "good business."

It has been repeatedly suggested that the American Institute of Architects should undertake to do this. They certainly should, and they would do far better to do so, than to sanction competitions of small residence work and then approve of material firms and book selling organizations advertising and offering these A.I.A. approved plans for the sum of \$25.00! Thereby certainly not making the already difficult task for an individual architect to convince an owner who, through no fault of his own, is unfamiliar with what an architect's services are and naturally cannot bridge the chasm between \$25.00 and 10%! Both endorsed by the A.I.A., any easier.

It occurs to me, that even though the A.I.A. may act and awaken to the fact that professional standards and business conditions are changed and that it must bridge the gap between public and architect, even though it does take up this long suggested plan, after this has been rehashed "in committee" and reported on, a document may be brought to light that will be unintelligible to the readers for whom it is intended.

In the meantime we have our wealthy architects who are donating to this and that in the cause of Art that some of them might do something for Living Architecture Today, for their profession, for the public good. Let them get together and donate a series of educational advertisements in our National Magazines! Here is a golden opportunity toward a worthy cause.

Of course some of these point to Fifth Avenue and say there is an example, Architecture has already sold itself and proven that it pays and they have plenty of work in their office already. But how about the rest of the Avenues that need Architecture and Architects!

Harry Lucht.

To the Editor of PENCIL POINTS
Dear Sir:

Since reading your article entitled, "Every Architect and Draftsman a Salesman" in the October issue, I have been trying to put some of the thoughts it awakened on paper, but the same old excuse which the architects use so frequently, "too busy," has been my trouble. I note the article written in the December issue by Mr. Fishe, and I should like to add a word or two, since unlike Mr. Fishe, I have studied architecture.

I believe there is no denying that the architect has only himself to blame for the lack of confidence and appreciation of his services that the average public now entertains. I believe the reason for this is that the architect has had to overcome a great many obstacles in putting the profession on a high standard, and in overcoming these he has not realized that times have changed, and have automatically taken care of certain matters, nor has he been as quick as others to take advantage of new conditions. He is too wrapped up in his profession to consider it a business, and to apt to criticize others for taking advantage of his lack of business ability.

Just an instance: recently I was walking down a certain avenue in New York with a more or less prominent architect to whom I had just been introduced. He glanced up at a certain building which displayed a sign showing that the building was being financed, designed and erected by a well known contractor. He shook his fist at the building, and said, "They ought to be hung." He was an architect, and although he did not exactly say the building was a poor design, he was sore because a contractor had designed the building.

Now maybe I am wrong, but I feel that he was entirely wrong. Instead of exploding, it seems to me that it's up to him to analyze this situation and see why he or some other architect did not get the job, or else don't enter that field.

As I analyze it and bring out the faults of the architect, the building in question was a commercial building being erected in a truly commercial way, which is the way that appeals to the business man today, and I'll warrant there was a respectable sum paid the contractor for the architectural work as well as for the financing and building.

Now let me state here that I am not in sympathy with a great many concerns of other professions who take advantage to earn a few extra dollars by saying that they will take care of the architectural work and then hire a draftsman at \$1.50 an hour at night to make the plans.

But I am in a certain way more in sympathy with such a concern as this one in question, who maintains a regular organized architectural department and advertises, and makes use of that point.

If the architects resent the treading on their feet by the contractors, they should beat them at their own game instead of condemning them. The best way to fight any battle is to study the other man's tactics and to hand him some of his own medicine. If the architects want this class of work, let them organize and maintain just such an organization as this contractor maintains, and be able to approach the business man on the same basis.

Furthermore, if the architect should organize some sort of scheme he would have a big selling point to the owner by being able to assure him that the building would be completed exactly according to the plans and specifications. Why doesn't he do this? Because he is not a business man and he wants his architecture to be a profession and undoubtedly he is right, but if he wants it as such, why not let the other fellow get his, and the architect confine himself to other fields than commercial buildings?

Now as to educating the public as to the advisability of employing an architect, I believe this is being done to a certain extent, but not enough. There are too many meetings of the architects themselves, and not enough of the architects getting out and educating the public. Too many papers written and published in the architectural periodicals. Get the articles in the papers that the business man sees.

Another way is to do some good conservative advertising. In this field the architect hasn't kept up with the times. The architect can no longer say that it isn't done by the best of people when in society those who are considered the best import near royalty so as to advertise their social standing. Advertising is one of our big businesses today, and I might almost venture to say that it is a profession, as there are schools to teach the art of good advertising.

It may be said that a doctor or a lawyer doesn't advertise, but they do unconsciously. A great operation, or stride in the medical profession, or a great court case, is published in detail by the periodicals of the times. Architects should take more time, and make the erection of a building an interesting article, and also carry an occasional ad. I am sure you would find these periodicals other than architectural periodicals in a more receptive mode.

A case comes to my mind of some work which we were doing, and we got up an article with illustrations but found that the attitude of the editor of the periodical was not very cordial when we called and presented them, and the net result was that this article, when it did come out, was like a death notice in size and tone, and our "flowers" were all forgotten.

I wonder how many words and how many pictures would have been published if we had offered to pay something to put the article where we wanted it. I don't mean in the advertising section. I ask you, when the architect's code of ethics contains a clause stating it is unethical to advertise, do you think this had any bearing on the editor's mind, especially when a periodical is only able to make money by its advertising matter?

If an architect has completed a successful building, let him tell the world about it just as the contractor does, and not let the world hunt it up.

As to the selling of architecture, I have no doubt that most architects will admit they are poor talkers, but in spite of this admission, there are very few architects who maintain a selling man in their organization, and would laugh at the thought of studying the art of salesmanship.

Among the biggest faults with the architect as to his lack of business tact is his discussion of terms when interviewing the client for the first time. He is so afraid

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of the other imaginative fellow architect outside the door that he mumbles "6%" in his desire to get the commission, and he forgets to have the contract signed before drawing a line. He forgets to mention the traveling expense, incidental expense, and special commissions, and has to do a lot of explaining after the preliminary plans have been submitted, with the usual result that he doesn't get any more than the 6%, and has to pay his own expenses, excusing himself by saying the business man doesn't appreciate his profession.

That's poor business, and a good business man sees it and feels that if the architect is not interested in getting his own interest protected at the proper time, he isn't likely to protect his, the business man's, interest. He therefore considers the architect a poor business man.

Another fault I might speak of is the general attitude of lack of responsibility for mistakes by the architect. The general practice places all responsibility for errors made by the architect or members of his organization upon the owner, who as a matter of fact has no control of the people making the mistakes. If an architect can't be reasonably responsible for his employees, he ought not to be in the business. I don't advocate the practice of entirely eliminating this clause from the contract, but if it should be revised so as to make the business man feel that he has someone to lean on, he would not feel that he has to "stand all the gaff."

As a parting shot to the architects who may read this, let me state one or two rules which my experience has shown work to good advantage.

Don't use the code of ethics as something to hide behind, but get out in front and enforce it. I don't include all of the rules of the code, but I do mean those you believe in and would otherwise use to hide behind. Of course this is meant for the entire profession.

Draw your own contract form and have it printed and ready, and above all, if you make up your mind in advance to charge 6%, don't take 5%. Stick to your guns, and although you may leave with a sinking cause, you will be surprised to know how many times it will work out to your advantage. Approach your client with confidence but with discretion.

Lastly, assure your client that you assume some responsibility for your own shortcomings.

Now that I have that off my chest and feel better, I must admit that conditions generally have improved since the time I started studying architecture. Still there never has been a time when greater strides could have been made to further the cause than the last few years, and the coming year looks as bright, but until the architect is willing to admit his profession is also a business, and take advantage of the commercial age we are now going through, he need expect no more recognition than he now receives.

Very truly yours,
Aaron G. Alexander.

WISCONSIN CHAPTER A. I. A.

THE secretary of the Wisconsin Chapter, A. I. A. Alexander Carl Guth, has sent us a copy of *Architectural Fragments* issued by the Chapter for January. It is newsy and breezy and we reprint portions of it below.

Architectural Fragments

First Blow, January 1925, Wisconsin Chapter A. I. A.

The Annual meeting of the Wisconsin Chapter A. I. A. will be held at the City Club, Wednesday Evening, January 14th. Dinner will be served at 6:15 and the business session will take place immediately after.

A number of new buildings which were commenced late last year, are now nearing completion.

An event of no little importance to every doctor, lawyer and architect is the annual meeting of his professional society. It means the reading of reports of the year's work of the various committees, and also the election of officers for the ensuing year. And so it will be for members of the Wisconsin Chapter A. I. A., for on the above mentioned date their professional society meets. Each member should make every effort to be on hand. It inspires the officers and above all it shows your continued enthusiasm in your life's work. Each member owes it to his fellow practitioner to be on hand. The

meetings of the Wisconsin Chapter during the past year have been better attended than ever before. Last year's meetings brought out 26 members. Chalk the date and make it 40 this year.

Tell the good wife that you will dine out on the 14th.

At the December meeting the nomination committee submitted the names of the following members to fill the places vacated on the Executive Board by Messrs. A. C. Eschweiler and Fitzhugh Scott, whose terms expire and who are not permitted by our By-Laws to succeed themselves. The nominees are Messrs. John S. Shepherd, C. Leenhouts, MacDonald Mayer and A. C. Eschweiler, Jr.

At the last meeting of the Chapter a matter of the utmost importance was discussed and that was the filing of catalogues that are received in every architect's office by the dozen every day. The problem is big enough to warrant the setting aside of a whole meeting for discussion. It was a step in the right direction to pass the resolution instructing the secretary to have suitable cards printed that might be sent to firms sending literature of any size except that which is urged and endorsed by the Institute. This matter bears further thought and consideration.

The most important meeting of the year occurs on the 14th.

Our own Henry Hengels drained his ink bottles, turned off the heat, fired his office boy, slammed his office door and with his beloved camera under one arm and dear wife under the other, has hied himself to sunny Egypt. Pretty soft, Henry, pretty soft.

Hail to our newest member, Armin C. Frank. The secretary has just received notice of his election to the Institute.

Mutules in the cornice, acanthus round the door, Small panes in the windows—three feet from the floor. Georgian in the country; Neo-Grec in town— That's the stuff to give them, if you want renown.

The Chapter now includes 4 Fellows, 55 Members, 13 Chapter Members, 8 Associates and 1 Honorary Associate. This makes a total of 81 all told, and represents a gain of 5 over last year. During the last year there have been no withdrawals, no losses by death, no suspensions and one expulsion.

Old copies of *Architectural Fragments*, just the thing for pantry shelves, may be obtained at this office.

G. E. Wiley, formerly a member of the Minnesota Chapter has been transferred as an Institute Member to the Wisconsin Chapter. Here's welcome to Comrade Wiley. By the way, he is with the School Board.

It is reported that one of our eminent architects, Roger Kirchoff, Thursdayed in Wauwatosa last month.

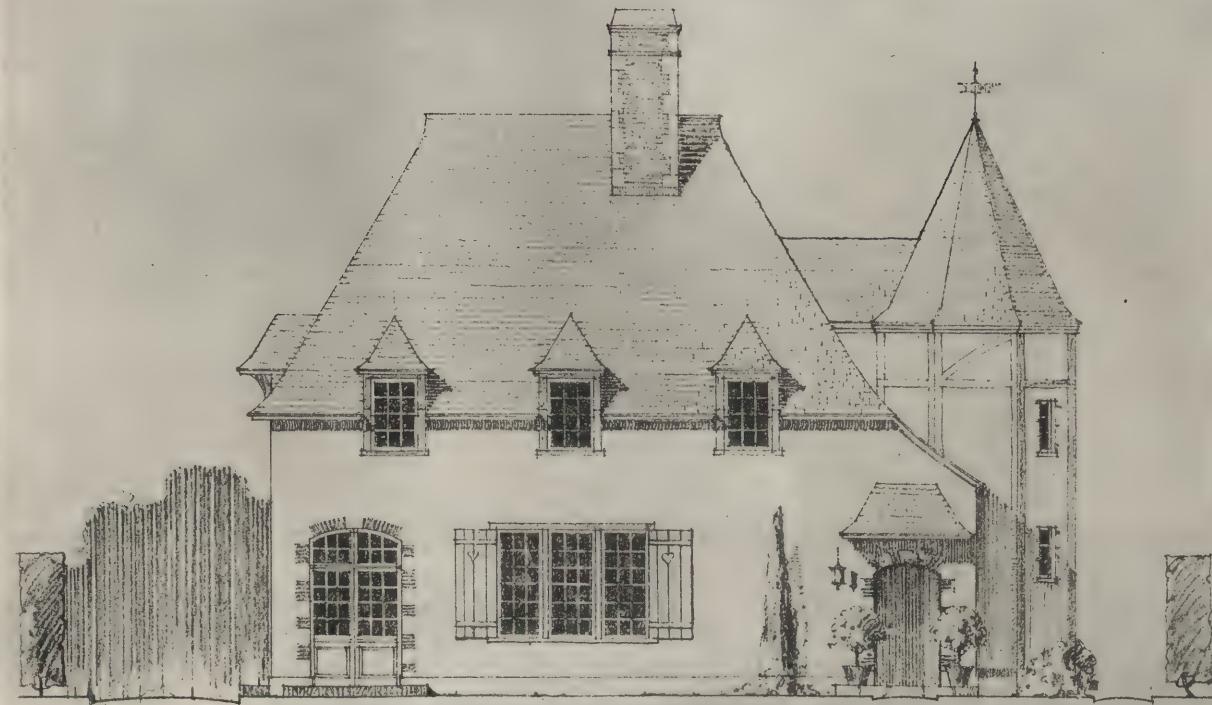
It must be awful to be a genius and to sit around thinking of new ways to be strange.

New Years Wishes: I wish someone would invent a real cross word puzzle.

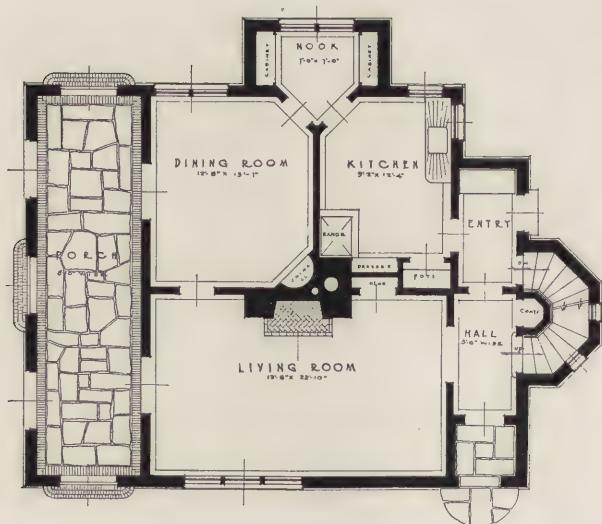
T. L. Rose
I'd like to meet a real checker player this year.
Wally Judell

Patronize our Advertisers, and Come the 14th.

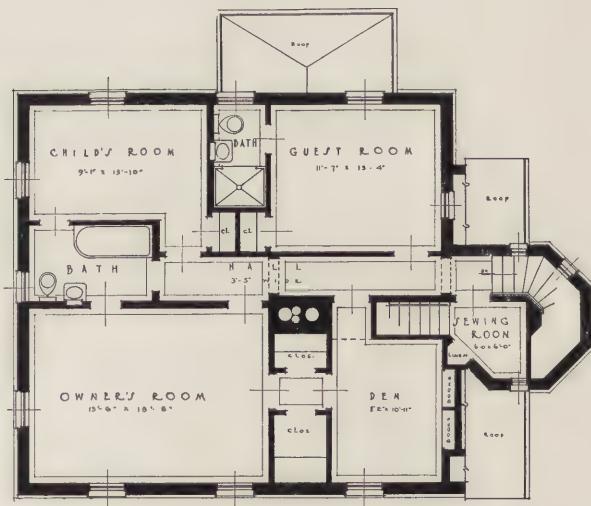
PENCIL POINTS



Street Elevation



FIRST FLOOR PLAN



SECOND FLOOR PLAN

*House for Angus Chisholm, Esq., White Plains, N. Y.
Edward F. Fanning, Architect, New York.*



R. B. WILLS of Boston gets the little prize for his contribution, The Office Boy and the F.S.D., reproduced in this department for January.

And here are a couple of "pomes," one from an architect and one not. We present the "not" one first.

T. P. to P. P.

Oh, I am not an Architect,
(For which I thank the Lord),
No, I am not horn-rim bespect-
acled above a board.

The T Square is unknown to me,
Likewise the ink so sloppy,
An advertising man I be,
I am a bear on copy!

And with the others in like stead
I joyfully combine;
Ho for the layout and the spread!
Ho for the agate line!

And this is our opinion sage,
Your magazine's too fat!
Just print each advertising page
And likewise "This and That."

T. Put.

And here is the other:

On Cartoons and Doggrel

or
VEILED TRUTHS

Shut, within the quick lines of a cartoon,
Or bound, within most roughly hewn verse,
Are often mured bright thoughts and rare, clear wisdom,
And often proph'cy, and at times, a hidden curse.

Crystallized, within the grinning gargoyle,
In line, in phrase, or carved in wood or stone,
Are pent the protests of a people's thinking,
Proclaiming, they're alive, and not just bone.

Thus, through the mask, in classic ages,
Did the Greek protest the tyrant's acts;
Came then, the sculptor with his Gothic grotesques,
Heaping coals upon the church's backs.

Now, is the day of thund'ring presses,
Making record of the thoughts we think,
But still, must mask, and car'cature and doggrel,
Speak their veiled messages, through printer's ink.

For some there are, who know not tol'rance,
And truths there are, sometimes too bright to print;
Because of selfishness and fear, and favor,
Much wisdom must revealed be, through the hint.

And some there are, without a sense of humor,
Whose prim respectability proscribes a laugh;
But worse than these, are those unfortunates,
For whom, great thoughts, must obscured be, by half.

Ernest Olaf.

Mr. Ernest Peixotto has discovered something which we have all known for some time. We published some of his superb drawings a little while ago and he writes "Thank you for the article of which many of my architect friends have spoken. You certainly are widely read."

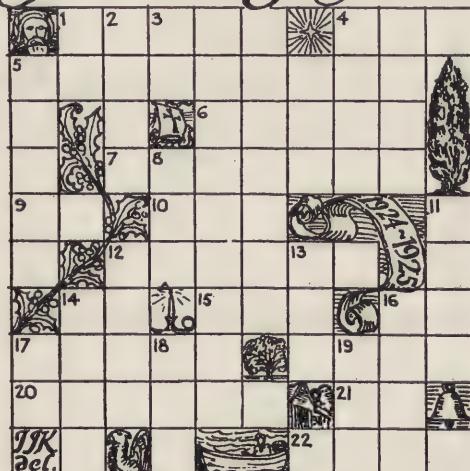
WELL, we knew the prevailing cross word puzzle craze would hit this famous department sooner or later and here is the first one, in the form of a Christmas card. We have another which is crowded out of this issue for lack of space, but which will be reproduced next month. We do not intend to devote the entire editorial section of PENCIL POINTS, or even all of this department, to cross word puzzles, but any good ones dealing mainly with what the architect and draftsman does and thinks about will be considered.

HORIZONTAL

1. The kind of Christmas we wish you.
4. What mince meat goes into.
5. Well-known holiday.
6. The kind of New Year we wish you.
7. What 1925 will be.
9. Child's exclamation on seeing Christmas tree.
10. What this is not a work of.
12. What we think cross-word puzzles are.
14. The poor Indian.
15. Christmas noise.
17. What Santa Claus lands on.
20. Favorite saint at this season.
21. State producing Christmas trees.
22. She sends you good wishes.

VERTICAL

1. Well-known telephone central.
2. Cross-word puzzlers' favorite country.
3. State consuming Christmas trees.
4. Whom children should thank.
5. Something to sing on Christmas.
8. Favorite holiday occupation.
11. What one decorates for Christmas.
12. When we hope to see all our friends.
13. Something we used in making this.
14. How much good we wish you.
16. He sends you good wishes.
18. What we hope this has not given you.
19. What 1924 is approaching.



*Edna S. and
John J. Klaber.*

PENCIL POINTS



Linoleum Print by Tom Rayburn, Howard Yerges and Paul Wood, Columbus, Ohio.

THAT little piece we ran in the paper a while ago about making attractive Christmas cards, etc., by means of the linoleum print method seems to have made a hit with quite a lot of our readers. Several have submitted samples of their handiwork, some good and some not so very good. Here is the reproduction of one of the good ones, together with a letter from the artist himself in which he generously gives credit to those who collaborated with him. We thank you, Mr. Wood, first for understanding us in what we are driving at, and second for having expressed some of our objects better than we have been able to do ourselves.

Here and There and This and That
of Pencil Points, Esteemed

Dear RWR:

The enclosed linoleum print will be one of the bushel basket full of such entries that you'll doubtless receive for your department at this gladsome season of the year, but we couldn't resist getting in on the "competition." After the linoleum was carved, it was nailed to a wood block, printer's ink applied with a small photo roller, and impressions taken off with an old fashioned letter press. We made a number with a board and a cabinet maker's glue clamp until we located the press. The card was the result of the collaboration in design, cutting, and printing of Tom Rayburn, Howard Yerges, and Paul Wood, all draftsmen of the office of Howard Dwight Smith, Architect.

And while we are on paper addressed to you, we would like to tell you that we do not agree with one Mr. W. C. Callahan, of this city, who, in the November number, slipped you a padded brick. The writer does not know friend Callahan, but to judge from his letter, I fear he lacks a sense of humor. He must be inclined to think of Architecture and all connected therewith as glorious combinations of things separate and apart from human beings, so holy, or something, that it must all be taken ultra-seriously. The American architectural journals are, as a rule, about the most aristocratic, interesting, well written and illustrated "trade papers," if one may call them so, that we have today. The major subject is uniformly treated with all due dignity, and PENCIL POINTS is no exception, as I see it. From the first issue, it has seemed to be trying to reach us draftsmen of the country in as personal a way as is journalistically possible on a large scale.

Until the advent of this department which is such

anathema to Mr. Callahan, it was as straight-laced as any of its brethren, and I, for one, appreciate the fact that to be really "personal" and create an *esprit de corps* among the subscription personnel it needed a little palaver and an occasional guffaw. The daily press has for years found its "Conning Tower," "Line O' Type," and other "colyums" of enduring interest and value. The architect's "Colyum" has its place, too.

Good architecture intimately concerns folks, and the more PENCIL POINTS can get at the little interesting personalities of the men who are integral parts of the development of the profession, the better. The Jolly Good Fellow, who can appreciate his architecture, can see the humor and humanities in it, and can pass it on with a chuckle, is a boy who can help cheer this old vale of tears and laughter. Further—if the genial General Public can be shown that there is something more to Architecture besides uncertain costs, brigandish contractors, and being "artistic," perhaps the job of "selling Architecture to the heathen" may become easier.

Some parts of H.T.T.&T. naturally have seemed better to me than others—but another may appreciate most what I liked least. But all in all, I think the department and the idea back of it is tol'able enough to continue the march.

Yours truly,
Paul Wood

THIS seems to be the open season for sketches and we have to report an unusually good crop this month. Several are presented herewith and others are being held for early publication. Always glad to consider sketches in any medium, especially from those who have never before had their work published. There is talent all over this country and plenty of it, not to mention other countries, and the man whose name is absolutely unknown is just as welcome here as Birch Burdette Long. It must be remembered that Mr. Long had his first sketch published once.

Fred J. Woodward, 1423 Harvard Street, Washington, D. C. has PENCIL POINTS from 1922 complete in good condition, which he is willing to sell.



By Merritt F. Farsen, New York City.

PENCIL POINTS



CLERMONT-FERRAND
NOTRE DAME DU PORT
(MAS)

Meade A. Spencer, New York City.



This sketch and the one in the lower left corner are reproduced from the Sketch Book of A. R. Ambrosini, San Francisco, Cal.



A. R. Ambrosini, 1905



Gerald K. Geerlings, New York City.

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*Old Dutch Windmill on the River Road near Chicago.
B. G. Greengard, Chicago, Ill.*



Charles Leonardi, New York City.



*San Fernando Mission
California*



San Fernando Mission, Cal., M. Seklemian, Los Angeles.

Central Market, Columbus, O. Fern Kuehl Wieland.

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And here is a reproduction of a clever sign done for the Atelier Corbett:



New sign for the Atelier Corbett-Koyl made by John Truden, honorary member of the Atelier. The sign is green with black lettering on a yellow field and the atelier insignia below the lettering. Mr. Truden designed, jigsawed and painted it entirely himself.

BROOKLYN CHAPTER OF THE A. I. A.

Attention! Architectural draftsmen and students within a radius of fifteen miles of the Borough Hall of Brooklyn in the State of New York and on Long Island.

In the December issue of PENCIL POINTS there was an advance announcement of the forming of the Brooklyn Chapter of the American Institute of Architects of a draftsmen and student group to be known as the Student Affiliation of the Brooklyn Chapter of the American Institute of Architects.

This program is now ready for definite announcement and is printed in an attractive booklet in color containing a foreword by Mr. D. Everett Waid, President of the American Institute of Architects. The booklet not only contains this and the full program of the Student Affiliation but also other information of interest to draftsmen and students. Copies and application blanks to the Student Affiliation may be obtained by writing Mr. Lester B. Pope, Pratt Institute, Brooklyn, N. Y.

It will be well worth your while, draftsmen and students, to look into this matter.

Economy in Home Building, by Oswald C. Hering, price \$5.00, 210 pp. Robert M. McBride & Co., New York.

It would be well if every prospective client would read and thoroughly digest Mr. Hering's new book which is pleasingly done and easy reading for the layman not familiar with architectural terms. The points about the necessity of employing an architect are well brought out, and the book will be of value and assistance to all who intend building a home.



The Cincinnati Architectural Society's Party given at their Club Rooms on January 6th.

THE SPECIFICATION DESK

A Department for Specification Writers

Note:—In order that the greatest good may result from the series of articles on Specifications by Mr. Beach, of which this is the third installment, and the fourth part, it is desired that specification writers throughout the country read this material carefully and send to us any suggestions that may occur to them which will serve to clarify or improve any of the points covered in the articles already published, and those still to be published. Free discussion is invited and all valuable contributions will be published in this department. There is much to be said on the subject of modern specification writing. Mr. Beach is presenting his ideas. Let there be a free and good-natured discussion of the whole subject, for which our columns are wide open.—EDITOR.

SPECIFICATIONS

By W. W. BEACH

PART IV

SUPPLEMENTARY GENERAL CONDITIONS

PROCEEDING directly now to the subject matter of the specifications, assuming the use of acceptable standard forms of Contract and General Conditions, we have first to prepare the Special Conditions or Supplementary General Conditions to bridge between the former and the actual specifications of labor and materials.

These Supplementary General Conditions must contain all clauses, not found in the General Conditions, which do not directly concern the actual items in the finished structure, yet are nevertheless essential to its makeup. These are necessarily variable for different jobs, even though the body of the specification may be successfully standardized.

The Supplementary General Conditions should embrace:

A. Schedule of Drawings, if not listed on title page or in General Conditions.

B. List of addenda, with space for signatures witnessing each item thereof.

C. Temporary construction:

1. Superintendent's office.
2. Contractor's office and sheds.
3. Telephone service.
4. Temporary sanitary conveniences.
5. Temporary stairs.
6. Scaffolding, runways and ladders.
7. Temporary planking where required.
8. Enclosing building.

D. Mechanical conveniences:

1. Heat for materials.
2. Hoisting apparatus.
3. Temporary heat for building.
4. Temporary lighting.
5. Water supply.

E. Responsibility for Premises:

1. Protecting walks, curbs and fences.
2. Boxing trees and shrubs.
3. Charge of premises. (If separate contracts are let to masonry and carpentry contractors, the former should be in general charge until walls are ready for roof or are completed, at which time he should be required to put the premises in a stipulated condition and transfer his responsibility to the carpentry contractor. The architect should be called upon to witness this transfer.)
4. Limitations of guy wires and ropes.

F. Protection:

1. Watchmen.
2. General safeguards.
3. Protecting footings against frost.
4. Protecting finished masonry.
5. Protection against storm-water and pipe-leaks.
6. Removing snow and ice.

G. Procedure:

1. Lines and levels.
2. Reference points and bench-marks.
3. Time schedule.
4. Divided procedure (for large work).
5. Progress photos.

H. Priced allowances.

1. Special materials.
2. Models.

(Materials and models which are to be subjects of priced allowances should be fully described under proper headings in the body of the specifications. General clauses regarding same are all that will be found here.)

3. Inspections (other than the architect's direct employees).
4. Laboratory services.

I. Tests

Et cetera. Large work may require the inclusion of several items in addition to the foregoing, while the omission of some of those given is equally possible in smaller jobs.

The matter of tests will of course be treated under the heading of each item to be subjected to tests, but there should also be in these "Conditions" a general clause covering tests not otherwise specifically called for. It should be worded after this wise:

"In addition to the tests of work called for under the various headings, the Contractor shall make such other tests of material and workmanship as are demanded by the Architect and as the latter may direct. The cost of same (including net cost of labor and material plus 15% for overhead) shall be carefully kept by the Contractor. If such tests indicate defects in materials or workmanship, the Contractor shall make all corrections to the satisfaction of the Architect and shall bear all expense of same, including cost of testing. If such tests prove the work to be in accordance with contract, the Contractor shall render statement of cost of testing and attendant expenses for audit by the Architect who will, if same is found correct, issue an extra order for the amount of same to be added to the contract price."

Neither tests, inspections nor any other variable element should be so handled in the specifications as to leave the contractor in doubt as to what to allow for them in his bid. Only such tests as can be estimated with reasonable accuracy should be specified and these in such a manner as facilitate such approximate estimating by each bidder.

If soil tests are considered necessary and a desirable part of a contract, a definite number of such tests should be stipulated and accurately described. If more are later indicated, they should be carried out at the expense of the owner.

Such a clause as "Additional tests as directed by the Architect shall be made by the Contractor without cost to the Owner" introduces an element of uncertainty which no bidder can divine. Only a contractor who knows his architect dare tackle such a contract and he will probably be able to figure where he can compensate, if too many such tests be demanded. Practice of this sort is highly unethical—abominable.

There are undoubtedly many architects who "get by" with ambiguous and poorly-worded specifications, mainly by confining their lists of bidders to certain ones familiar with their work and who depend more upon such familiarity for knowledge of the architect's intentions than they do upon the specifications.

Such architects may eventually become dependent upon a certain ring of contractors and find the cost of their work mounting accordingly. Architecture can only be maintained on a plane of high professionalism by being held absolutely independent of favors from contractors and supply men. The practice of "give-and-take" in matters of building superintendence is vicious in the extreme—though it may

PENCIL POINTS

prove a handy means of prevailing upon a willing contractor to cover up the architect's mistakes and short-comings—together with some of his own.

Under the heading of "Tests" it is well to include a requirement too seldom found in specifications but which will serve to make the test of maximum worth. It is that the contractor shall furnish the architect with duplicate copies of a record of each test, neatly tabulated and accompanied by such explanatory drawings as may be necessary to render same clear.

It is also essential to prescribe that no test may be started except in the presence of a representative of the Architect.

The majority of the items suggested as subjects for specification in Supplementary General Conditions are of such common allusion as to demand no particular discussion, but some will bear more than mere mention.

One of the most fruitful sources of argument by and between contractors on a building is that of temporary heat. Heat required for warming materials in freezing weather is more or less simple insofar as the architect is concerned, hence we may dismiss it with a brief paragraph:

"The Contractor shall furnish all necessary heat to protect concrete, warm mortar and its ingredients, dry out plaster, and as may be necessary for any other work under his contract, before the building is enclosed, using therefore heating appliances approved by the Architect."

The architect probably will not be overly squeamish on this subject, provided such heating arrangements are adequate, safe and within proper limits.

But, when it comes to supplying heat in the building, enclosed or semi-enclosed, that's different. There's the heating plant of the building, of course; but it's never ready or, if it is, who is to be responsible for it and "why should the general contractor pay for fuel when he only has two men on the job to ten painters, five plumbers and as many electricians and steam-fitters?"

Why, indeed, except that he contracted to do so?

As a matter of fact, there are only two satisfactory methods of handling the proposition and those are either to have the owner pay the entire cost or have a single contractor pay it.

In the latter event, it can be in either the general or heating contract. Any attempt to pro-rate such cost among contractors is fraught with difficulties.

If a contractor is chargeable with expenses and damages due to delays in his work and such expenses include the cost of temporary heat, it should (a just portion of it) be so charged. But, in the interest of simplicity and harmony, the architect will avoid all possible pro-rating of damages or any other charges among contractors.

In lieu of better, the following methods are suggested as workable arrangements for temporary heating likely to cause the least friction or to create undue expense for the owner:

A. Have the owner pay for it direct in such cases as

1. When the construction is a part of or adjacent to an existing building of the owner containing a plant from which heat is available.

2. When the new work is so large that an extensive heat or power plant is required and same is likely to be ready for operation in time to be available for temporary heating. Such a plant requires a competent engineer in charge and he will likely be employed to make tests of the plant and can continue to operate it before and after its acceptance. Neither the steam contractor nor the owner would relish the idea of a third party, such as the general contractor, having anything to do with the operation of such a plant.

3. When the work, though not so large, is divided into several contracts, and yet the operation of the plant by the heating contractor appears, for some reason, to be not entirely feasible.

One of the principal objections to the operation of the heating plant by the owner should, however, be carefully weighed. It is that the work of completing a building heated by the owner always seems to drag more than in one in which the contractor pays for the heating. Whether or not this be true, the owner is quite likely to feel that such is the case.

To obviate this, provision can be made that each contractor shall pay from one to ten dollars a day (according to the size of his contract) as his share of the cost of heating the building while his men are working in it. Such

charges can be made sufficient incentive to speed up the work but, like anything of the sort, they are a nuisance for the architect and a source of annoyance to the contractors.

B. Have the heating contractor pay for temporary heat in such cases as:

1. When the apparatus, though not unduly large, is nevertheless of a nature to require expert attention.

2. When the work is obviously to extend through winter months, the heating plant to be ready before or in December, but the heating contractor to be on the job all winter.

3. When the work is divided into small contracts so that either the owner or heating contractor is the obvious party to furnish the heat and reasons for the owner not doing so preponderate.

C. Have the general contractor pay for temporary heat in cases where it is improbable that the heating plant will be ready when such service is needed, hence a complete temporary heating plant subtended or when the general contract is by far the greater part of the job and the limitations cited under "A" and "B" do not hold. It is especially desirable to hold the general contractor to pay for all temporary heat for a building contracted to be completed in the fall and wherein no such heat is required if the work is delivered on time.

When the general contractor is to supply the heat from the owner's plant, careful stipulation should be made as to his responsibility for all damages resulting from such operation of the apparatus. Further, there must be provision in the heating contractor's specifications for such use of the plant and the checking up of damages against the party operating it.

Provision must also be made therein for temporary connection of as many radiators as will be needed for such heating. This should either be included in heating contract price or should be named in the bid as an extra, to be charged only if required.

But, by whatever method, let the matter of temporary heat and its concurrent expenses be most explicitly set forth.

This is advisable also of the temporary enclosure of the building needed to render the heating feasible. The specifications must state that all openings must be closed, how this is to be done and who is to do it.

It might be well to set down here a caution which may be needed by the younger architect, especially if he be overly solicitous about certain engineering phases of the work, due either to inherent conscientiousness or a slant toward engineering in general. This has to do with the careful avoidance of the architect's or engineer's responsibility for the equipment of the contractor, his acts or those of his employees.

The architect and his assistants design the structure and all of its component parts but leave to the contractor to a considerable extent all questions of how he will operate to effect the correlation of those parts in the manner specified to produce that structure.

Now there are several elements in connection with such operations in which potential danger constantly lurks. Two of these are shoring and hoists.

To a certain extent these should be subject to the criticism of the architect (or engineer) in charge but the specifications should carefully state that "no such criticism or approval shall imply responsibility in any degree whatever on the part of the Owner or Architect for the design, strength or adequacy of any shoring, hoists or other temporary works or equipment provided by the Contractor. The latter alone is solely responsible for same."

The time schedule should receive very careful attention and reasonable progress dates be fixed and agreed upon so that owner, architect and contractors will each be able to keep abreast of the job, know at any stage whether or not it is up to time.

And here another caution : "The Owner does not agree with any Contractor that the work will, at any given time, be advanced to the stage stated in the schedule. It is understood that each Contractor will so forward his own work as to do all in his power to make compliance with the schedule possible for all concerned, but failure on the part of one or more Contractors to live up to same will not be held to render the Owner liable for damages on account of delays to any other Contractor."

PENCIL POINTS

Under the caption "Lines and Levels":

"The Owner will have a competent Surveyor establish lot lines and the front and side lines (or two major axes) of the building, also a bench-mark or some convenient permanent object. From these and from the building drawings, the Contractor shall lay out his horizontal dimensions and reckon his heights and depths and assume all responsibility for same."

Nothing has been so far said about the bid form, certified check, bond or the Owner's privilege to reject all bids. With exception of the bond, these are subjects for the advertisement and invitation to bidders and have no place in the specification, which latter has to do only with the obligations of the two parties *after* the contract is signed.

The bond should be in the same category but is usually submitted shortly after the contract is drawn. Bidders should always be advised whether or not a bond will be required and who will pay for it. All bonds nowadays are for the full amount of the bond, if signed by a surety company, and are supposed to cost the contractor 1½% of the amount of the contract.

Except in public work and work of a similar nature (such as churches, lodges, etc., where a committee is dealt with, instead of an owner or the officers of a corporation) the bond can very well be done away with, if the contractor bears a fair reputation and the architect will watch his payments for materials, pay-rolls and sub-contracts—as he should do anyway. A good architect can readily save the owner the price of the bond.

Accepting a personal or "real estate" bond is not good practice, although such bond need only be for a fraction of the contract price and will cost the contractor (hence the owner) much less, perhaps nothing direct. But, if the architect be called upon to assist the owner in forcing the private bondsman to make good a contractor's default, he may find himself quite needlessly antagonizing a potential client—better stick to the impersonal surety company, if a bond is demanded.

(To be continued)

LABORATORY SPECIFICATION AND CONSTRUCTION HELPS.

By OTTO GAERTNER

SOMETIMES the insides of the horizontal vent ducts in the top floor or attic become covered on the bottom with an accumulation of fuzz or dust. This is more common in the ducts for general ventilation and less common in those from the chemical laboratory room where strong fumes occur. It is this accumulation of fuzz which increases the fire hazard in the upper parts of schools and is responsible for the request from insurance brokers that the roofs and the top floor ceilings be made fire-proof. Workmen examining ducts with matches and candles are likely to set the accumulation on fire.

There are no set rules for the proper ventilation of the laboratory buildings. Generally one or more separate systems are used to ventilate the laboratories themselves and a separate system is used for the ordinary class rooms, offices, etc. The fans or blowers for general ventilation are generally placed in the basement while those for the laboratories are generally placed in the laboratories themselves or in the attic space. There should be as few fans as possible, the more fans, the noisier will be the system. One good system is to have the fresh air ducts placed so as to bring in the air near the windows and to have the exhaust ducts placed so that the air will be taken out on the opposite sides of the rooms. In this way the system will work equally well when the windows are opened as the fresh air must travel through the rooms before reaching the exhaust ducts. If the room is large it may have its own exhaust system or even more than one. Sometimes several rooms are placed on the same system. For economy in that case a remote control switch should be specified for each room when the fans are in the attic so that it will not be necessary to send an attendant to start the motor each time it is to operate, nor would it be necessary to run the fan continually when the rooms are only used part of the time. Pilot lights can be placed beside the control switches so that it may be readily seen when the fan is in use. This will prevent it from being shut off by some one in

another room which happens to be on the same system. Once it is turned on from one of several switches it may be shut off from any switch and not necessarily from the same one that turned it on. For economy it is also possible to install fans with three speeds so that only the amount of ventilation needed at any time may be had rather than an excess of ventilation together with the increased bill for electric current. In large laboratory rooms it is well to have some general ventilation as well as ventilation to take off chemical fumes. The general ventilation should be so regulated however, that it will not be affected when the fans of the other system are turned on. In this way it may be possible to supply fresh air for the room by means of either system. An economical way is to have only one means of supplying fresh air from a blower in the basement and have the exhaust flues used in the ordinary way except at such times as fumes occur. At such times fans placed in the exhausts can be turned on to pull the fumes out and help draw in the fresh air. It is impossible to go into all the details that might arise as each building and each room is likely to have problems of its own.

Grilles should occur both at the floor and at the ceiling of each exhaust duct so the heavy fumes near the floor may be taken out as well as the lighter ones above. Sometimes a system of ventilation is installed so that most of the ventilation is taken off directly from the tops of the laboratory tables. If the tables are free standing, as in a large class room, the tables are usually arranged so that one student can work on each side at as many such work places of about four feet each as the length of the table will permit. The miscellaneous connections for water, gas, electricity, gutter or sink, etc., are then placed along the center of the table. Then also for every four feet there will be a ventilating duct about four inches by six inches, extending a short distance above the table and provided with a hood under which the chemical experiments take place. Sometimes folding sheet metal side curtains are also specified so that the Bunsen burners and appliances may be enclosed under the hood in order to allow as little of the fumes as possible to escape into the rooms.

Of course, there must be some provision to take any such escaping fumes by means of other ventilation in the rooms. The ducts from the hoods are run horizontally underneath the table tops and increased in size as more are connected together, until they reach the end of the table, from which point they may extend vertically to the ceiling and into furred in vent ducts; or they may be dropped to the ceiling below and be thus connected. In general the ducts should be laid out so as to be as straight as possible; offsets and elbows cause friction and noise. Numerous cleanout places should be specified so that paper and other material that may be drawn into the system may be removed. One reason for specifying that the fans be placed in the attic, instead of directly in the rooms, is the elimination of the noise of the fans from the rooms. The specifications should call for the necessary brackets and hold fasts to properly fasten the vent ducts under the tables. The tables are generally arranged so that all material is fastened to one side of the table while parts of the other side are removable for access to the ducts and piping. In work of this kind it is customary to specify dampers behind exhaust grilles to help regulate the system rather than to specify louvres which gather dust and obstruct a large amount of the grille area. Such dampers should be installed so that they can not be tampered with when they are once set. If louvres must be specified, they should be set vertically and not horizontally so that they will not catch so much dust.

Some buildings have things arranged differently from others. Some people are accustomed to one method and some to another. In some laboratories all work is done under the hood mentioned above, whereas in others, special hoods are provided for special work giving off obnoxious gases. Sometimes no hoods are provided on the tables at all and all such work is done in specially constructed hoods. Such hoods generally have separate exhaust flues and are entirely enclosed. They are generally constructed with as much glass surface on the top and sides as possible to let in the light and to permit watching the apparatus without opening the hood. The materials used should be fire-proof and acid-proof. The bottom of the hood generally

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consists of a two-inch thick slab of soapstone. If it is made thinner it may be cracked if the apparatus standing on it were to give off excessive heat. This slab is supported on angle iron cleats and brackets bolted to the walls, or on galvanized iron pipe frames with flanges to fasten to the walls and floor, and to the underside of the slab. If the angles are used they should be specified with one and one-half inch long legs, properly drilled for the bolts for fastening them and also for fastening an apron underneath the slab and any other work. If the pipe stand is used, headless fittings should be used for appearance and there should be one horizontal rail about halfway up from the floor. Piping one and one-quarter inch in size or heavier should be specified and vertical posts should occur about every three or four feet. Sometimes a small sink of soapstone is needed in the hood and sometimes just a small waste hole to receive the end of a rubber tube will do. An apron of soapstone is placed under the slab and to it are fastened the valves to control outlets in the hood. The hood should contain as little metal work as possible as the fumes are generally corrosive and valves, electric connections, etc., if placed inside must frequently be replaced.

(To be continued)

STAIRS

WILL some kindly soul, blessed with the semblance of authority, please arise and inform our draftsmen as to the first principles a'nt the designing of stairs,—tell 'em that there's no possible excuse for a stair being improperly designed.

The older heads among us acquire so readily the habit of taking things for granted that it frequently comes as a distinct shock to discover a young man doing things on a drafting-board which denote a distinct lack of knowledge of certain rules which we may have come to regard as fundamentals. As related to the design of stairs, the more important fundamentals are these:

First, stairs must be SAFE.

Second, they must be AMPLE.

Third, they must be CONVENIENT.

Fourth, they must have abundant HEADROOM.

Fifth, they must be EASY, which means properly PROPORTIONED.

Sixth, (first, last and all the time) STAIRS MUST BE SAFE.

To make stairs safe, several requisites are to be considered. Access to stairs should be unencumbered and should be, as nearly as possible, where expected. It is most dangerous for one to arrive unexpectedly at a stair entrance, especially at the head of a flight.

The flight itself should not contain surprises in the shape of winders forming narrow treads in the line of travel, or single risers in landings. And the lower landing should be just where expected—not two, nor even one, riser removed beyond the lower newel; but, in public stairs, which we are mostly discussing, the lower riser should center on the lower newel, thus eliminating those accidents whereby one crumples up or sprawls headlong because he thought he was clear down and wasn't.

Handrails should be just where one would naturally put his hand to grasp them, one on each side of stairs more than three and a half feet wide, up to five feet. If stairs must be wider than five feet (or, at most, five and a half) they should be nine to ten feet wide and carry a center rail or pair of rails.

"Safety" implies also that all treads shall have surfaces finished with some sort of abrasive or non-slip surface—one that won't wear smooth in short order. Nor is it sufficient that the tread itself be rough. This surface must extend clear over the nosing "for safety's sake." The practice of using a non-slip insert in the tread, back of a perfectly smooth nosing is bad, almost as bad as using a metal edging to hold the insert in place—and trip the unwary.

Use a good abrasive and use it for at least the entire outer half of the tread, so there can be no danger of tripping.

Statistics (but who reads 'em) show innumerable accidents, many fatal, and many lawsuits because of accidents due to slippery treads, nearly all of which could probably have been prevented if the stair treads had been of proper materials.

Most building ordinances are explicit in prescribing the limits of all stairs intended to be used as means of exit from public meeting places. But, for those whose practice is not circumscribed by ordinance, this caution holds for all stair design: Make them ample.

This applies to the headroom as well as to the width. One should not be satisfied by measuring six feet six inches straight up from the top edge of the tread, nor even seven feet, and say "it will do in a pinch." A "pinch" is exactly what it would prove to be. Eight feet should be the positive minimum for such measurement; more, if possible.

For that reason, the stairs should always be laid out carefully, either on a section, or dotted on an elevation, or in separate detail, taking pains to work out the lines of the soffit and eliminating every suspicion of cramped headroom.

"Ample" also means, in addition to your stairways being of sufficient width, that there be enough sets advantageously placed to provide for every emergency. If your city ordinance (if you have one) sets forth a demand for certain minimum widths, with fire-escapes as the alternative, then see that you, if you love your fellow human being and cherish hopes of the hereafter, provide all the stairs. Leave the fire-escapes for those potential man-slaughterers who aim only to fulfill the letter of the law and care naught for the appearance of their buildings nor the well-being of the occupants thereof.

Is there anything in our modern architecture more ludicrously inconsistent than to see a magnificent building, costing millions and detailed with all the refinement of the best in classic or Gothic ornament then, before completion, disgraced with all the horror of one or more zigzag outside stairs clinging to its façades?

Any architect who permits outside fire-escapes on his buildings, admits his shortcomings, either as a designer or as an interpreter of his responsibilities. His best excuse is that his client compelled him—and he should have that in writing. It is a poor alibi, when a fire or panic comes, and the women and children begin dropping to death off the fire-escapes, to say "I complied with the code and that is all that's required. Collum, Lintel, Post & Beam put fire-escapes on the outside of all their big buildings." Many architects of large practice have been sorry for some of the things they have done.

Take some of the space occupied by your monumental colonnade and utilize it inside the building for enclosed fireproof stairs that can be in daily use, that are sealed against smoke and flame, and in which people can take their time to reach the street—without danger.

Then, in addition to designing your stairs so they will be safe, convenient and ample, make sure that they are properly proportioned. Some of our younger men seem not to have been taught this very important attribute to the perfect stair.

These men must be told that, whereas a stair with an eleven-inch tread and a seven-inch riser is quite all right, it does not follow that the sum of tread and riser should always equal eighteen. As a matter of fact that is *only* true of a seven-inch riser with an eleven-inch tread. Let your riser height vary by a half-inch and the "rule" fails.

The best workable formula is that twice the rise plus the run equals twenty-five inches for stairs in general and twenty-four inches for school house stairs.

This results in the following table which is a pretty safe one to keep handy:

Rise	Run	Rise	Run
3"	19"	6"	13"
3½"	18"	6½"	12"
4"	17"	7"	11"
4½"	16"	7½"	10"
5"	15"	8"	9"
5½"	14"	8½"	8"
		9"	7"

Except in locations where a step-ladder is permissible, insofar as the service intended is concerned, one should not carry the ratio further than the 8" rise and 9" tread of factory stairs. In fact, a steeper stair is forbidden by some ordinances.

But the point is that the ratios given will suit all conditions and should not be varied from more than an eighth

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of an inch in either direction, except for school stairs, where a half-inch can properly be taken off each riser.

And, just one thing more. Dimensions of treads should always be given from face of riser to face of riser, while dimensions of risers should always be accurately averaged from dimensions taken at building by the stair-builder and should not be actually figured on architect's drawings.

And, finally, make them *SAFE, NON-TRIP and NON-SLIP.*

A Reader

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing the publication. When writing for any of these items please mention PENCIL POINTS.

Color in Architecture.—Brochure just off the press with 12 full page color plates after original color renderings by Rudolph De Ghetto. Also many other engravings illustrating the text, which is by Mr. F. S. Laurence. A valuable addition to the architect's library. 60 pp. 9 x 12. The National Terra Cotta Society, 19 West 44th St., New York City.

Architects' and Engineers' Built-Up Roofing Reference Series. Vol. 1.—Flat Roof Specifications. A valuable document for every architect, draftsman and specification writer with 16 full page blue prints, specifications and descriptive text. 8½ x 11. The Barrett Company, 40 Rector St., New York City.

Specification Manual of Plain and Reinforced Concrete.—Coded specifications with index covering all types of concrete construction. Limited edition. Price \$1.00 per copy. Portland Cement Association, 111 W. Washington St., Chicago, Ill.

Heat Insulation for Houses.—Specification document covering subject with technical data on heating losses and savings to be effected by proper insulation. Detail drawings, treatment for bungalows and larger houses carefully set forth. 24 pp. 8½ x 11. Standard filing size. Flax-linum Insulating Co., St. Paul, Minn.

Dahlstrom Standard Construction.—Illustrated booklet covering metal doors and trim, elevator enclosures, partitions, conduo-base, etc. Sectional drawings and specifications. 30 pp. Standard filing size. Dahlstrom Metallic Door Co., Jamestown, N. Y.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen. Vol. 7 No. 5 shows examples of early English Terra Cotta with full page plates and descriptive text. Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Flues and Flue Linings with Related Data on Chimneys and Fireplaces.—Document covering the subject, with specifications, many drawings including details of construction embodying best practice, data on combustion, etc., with index and checking list. 32 pp. 8½ x 11. Prepared by the Structural Service Bureau for the Eastern Clay Products Association, 906 Colonial Trust Bldg., Philadelphia, Pa., from whom copies may be secured.

China Bathroom Accessories.—Catalog F. Illustrates and describes complete Fairfacts line including medicine cabinets and price lists. 16 pp. 3½ x 9. The Fairfacts Co., Inc., Dept. F-1, 234 West 14th St., New York City.

The Donley Book of Fireplaces.—Illustrated brochure showing drawings and photographs of many attractive fireplaces. Large sheets showing drawings of construction. 16 pp. 9 x 12. The Donley Brothers Co., 13933 Miles Ave., Cleveland, Ohio.

Minneapolis Heat Regulator.—Descriptive booklet showing all models of heat regulators, suitable for various classes of services. Lists and prices of accessories and complete information. 20 pp. Minneapolis Heat Regulator Co., Minneapolis, Minn.

Casements and Double Hung Windows.—Document illustrated with sketches and detail drawings showing various types of windows as applied to a variety of buildings. All hardware accessories clearly shown, specification data, etc. 48 pp. 8½ x 11. David Lupton's Sons Co., Philadelphia, Pa.

The Pergola Album No. 30.—Illustrating many types of pergolas in their settings. Very useful to those interested in country houses and grounds. 8 x 11. Hartmann-Sanders Co., Elston & Webster Aves., Chicago, Ill.

Grinnell Adjustable Pipe Hangers.—Catalog No. 3. Handbook on the subject of adjustable hangers for all types of service. Complete engineering and specification data. Handy Pocket size. 4 x 9. 120 pp. Grinnell Co., Providence, R. I.

The Regulation of Temperature and Humidity.—Complete catalog, handbook and specification guide, showing in detail the entire line of Johnson Temperature Controlling Devices for all types of buildings. 64 pp. 8½ x 11. Johnson Service Co., Milwaukee, Wis.

Lally Columns Vs. Rolled-Steel H-Columns.—Booklet discussing best type of column for a large variety of uses, illustrated with drawings, diagrams and facts. 16 pp. Lally Column Co. of Chicago, 4001 Wentworth Ave., Chicago, Ill.

Frigidaire.—Booklet on the subject of electric refrigeration for the residence, hotels, meat market, etc. Delco-Light Company, Dayton, Ohio.

Vestment Cases, Wardrobes and Confessionals.—Booklet dealing with special furniture for the Church. Reproductions of drawings and complete information American Seating Company, 1091 Lytton Bldg., Chicago, Ill.

Architects' Detail Plates.—The latest series now ready for distribution pertains to home, church and restaurant lighting. Each plate reviews a lighting problem completely and deals with actual installations. Curtis Lighting, Inc., 1116 West Jackson Blvd., Chicago, Ill.

What Color for the Roof?—Interesting booklet illustrated in color on the subject indicated showing interesting effects in Richardson Multicrome Roofs. Richardson Company, Dept. 88-B, Lockland, Cincinnati, Ohio.

Building Economy.—Monthly publication on the subject of brick work. The January issue contains an article on reducing the cost of brickwork by the use of a new combination, newest effects with common brick in residence construction with floor plans of a small house. 36 pp. Common Brick Mfrs. Assn., 2121 Discount Bldg., Cleveland, Ohio.

Theatrical Lighting Equipment and Effects.—Catalog and handbook covering line of specialties, technical data on the subject, tables and specification data. 76 pp. 6 x 9. Display Stage Lighting Co., Inc., 344 West 44th St., New York City.

Copper Flashings.—A handbook of data on the use of copper as a flashing material with standard details of construction and specifications for sheet copper work. 13 full page showing 71 different details. Much useful information applicable to buildings of all types. 8½ x 11. 66 pp. The Copper and Brass Research Assn., 25 Broadway, New York City.

Furniture for the Drafting-Room.—Catalog F-24. New catalog showing up-to-date line of drafting-room furniture and equipment. Useful wherever drafting is done. 40 pp. 6 x 9. C. F. Pease Co., 805 North Franklin St., Chicago, Ill.

A Modern Housewarming.—Booklet covering the subject of heating from the standpoint of comfort, beauty, health, safety, convenience and economy. Plates showing treatment of each room of the modern residence. 36 pp. United States Radiator Corp., Detroit, Mich.

Published by the same firm, The Complete Line. Data book on Bible paper covering boilers, radiators and heating specialties. Convenient pocket size, 270 pp. Flexible cover.

Heating, Ventilating and Air Conditioning.—A series of 20 bulletins in looseleaf binder containing information for the architect and specification writer on fans, heaters, air washers, mechanical draft and drying, engines, traps, disc ventilators, exhaust fans and blowers. Standard filing size. American Blower Co., Detroit, Mich.

Skylights.—Folder for the architect and specification writer containing data on Robertson Glazing Construction for industrial, commercial and public buildings. Illustrates all various types, detail drawings, descriptions of apparatus and specification data. 36 pp. 8½ x 11. H. H. Robertson Co., 1st National Bank Bldg., Pittsburgh, Pa.

Indiana Limestone for School and College Buildings.—Volume 6, series B. Brochure illustrated by many examples of the work of our best architects. General views and details. 80 pp. 8½ x 11. Indiana Limestone Quarrymen's Assn., Box 500, Bedford, Indiana.

Sykes Steel Integral Door-Buck and Trim.—Leaflet illustrating new and useful specialty. Patents pending. The Sykes Company, 2300 West 58th St., Chicago, Ill.

Metal and Glass Products.—Illustrated data sheet showing variety of glass construction and other items of interest to the architect. Standard filing size. Wm. A. Daunt Co., 110 East 42nd St., New York City.

Door-Ways.—Monthly publication for architects and others interested in folding partitions and door and window hardware specialties for many uses. Richards-Wilcox Mfg. Co., Aurora, Ill.

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Busy New York Architect Wants First Assistant. Must be man of fifteen or twenty year's experience as planner and designer of large work. Long-haired type of unpractical designer not wanted. Candidates must be thoroughly trained in all branches of modern architectural practice. Applicants are requested to write fully of their schooling and practical experience and the salary they would consider satisfactory for a trial period of two years. Box 2-F c/o Pencil Points.

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Available from February 1st, 1925, services of Roy R. Geffken, age 18 years, energetic and neat, experience $\frac{1}{4}$ "- $\frac{1}{2}$ " scale plans, $\frac{3}{4}$ " scale details, tracing, lettering, etc. Wishes to locate with architect in New York City, or in New Jersey, within commuting distance of his home, 199 4th Ave., Hawthorne, N. J.

Young Man, aged 18 years, experienced in scale plan work, $\frac{3}{4}$ " and full sized details, good tracer and letterer, not afraid of work. Desires to work with architect in New York City or vicinity. Ready for work February 15th, 1925. Address William Potgieser, 110 2nd Ave., Little Falls, N. J.

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Junior Draftsman, Swedish, 23 years of age, two months in this country, desires a position. Technical University graduate and two years' experience in general drafting. Erland Edwards, care of Haindl, 667 East 163rd Street, New York City.

Architectural Draftsman seeks position, 8 years' experience on banks, city residences, alterations, country houses, school buildings and apartment houses. Cooper Union, Columbia University and City College schooling. Salary \$45-\$50 per week. Andrew J. Palazzotto, 731 Bushwick Avenue, Brooklyn, New York.

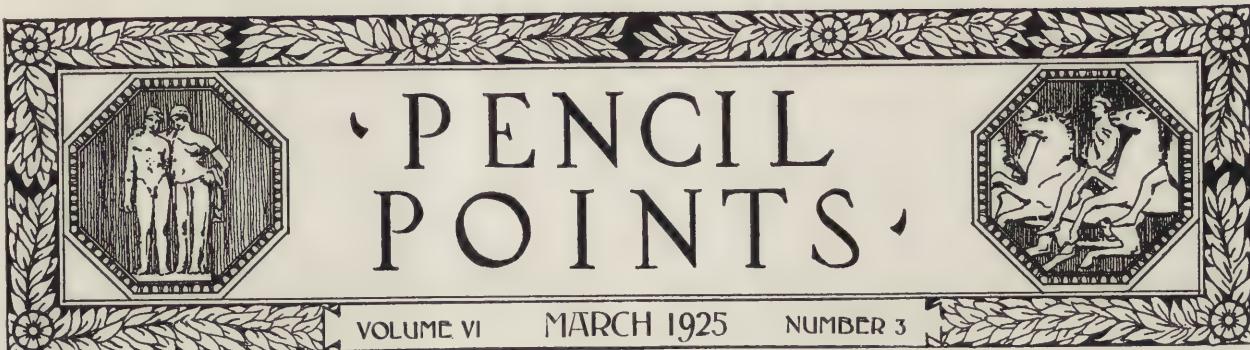
Young Man having had three years in vocational school in architectural drawing courses, capable of doing lettering, tracing, etc., wishes position as office boy with opportunity to work into drafting. George Moser, Jr., 138 East 235th Street, New York City.

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VOLUME VI MARCH 1925 NUMBER 3

OUR ADVERTISING SECTION

A SUCCESSFUL modern periodical must be a happy three-cornered partnership. The points of this triangle are the readers, the advertisers and the publishers. For the price paid for his subscription the reader expects, and is entitled to, a publication which fits his particular needs, whether it be a magazine of general interest or, as in the case of PENCIL POINTS, a journal edited to meet the special requirements of a large group of men identified with a profession. The advertisers, in order that their investments may yield a profit, must be sure of reaching the market for the commodities they offer on a fair and equitable basis. The publishers, if they are to prosper and remain in business, must receive a fair return on their capital invested and for the personal services which they give to the enterprise.

The first step in developing a sound and enduring periodical is to secure a good representative circulation in the particular field which is covered by the particular editorial point of view chosen. The second stage is to offer the use of this circulation at a fair price to manufacturers desiring to tell their sales stories to the readers of the paper. In the case of PENCIL POINTS a large and representative circulation among all groups identified with the profession of architecture has been developed, an edition of upwards of 14,000 copies now being required to cover the subscription list, sales through the news companies and book stores, to fill orders for particular copies and for service and checking copies to the advertisers and the advertising agents.

In this issue we are presenting in the advertising section the advertisements of 146 different firms who offer their products or services for the consideration of our readers. They endeavor, of course, primarily to sell their merchandise, but it is also true that many of these firms have constantly in mind the giving of valuable information which will be useful to the profession but which may not be reflected at once, or at all, in the volume of business done. A broad spirit of co-operation for the general good of the building industries is being manifested by the majority of firms using the architectural press for advertising purposes. They are glad to furnish material which will be helpful to the student and the working draftsman, as well as to the employing architect and specification writer. Many of them

offer in their monthly advertisements attractive items of printed matter which are in themselves valuable to those who apply for them as well as valuable to the issuing firm from a sales standpoint. This development has been very marked during the past few years and is an excellent indication of the broad merchandising policy being followed by those far-seeing manufacturers who are human beings as well as good business men.

We are proud of the advertising section of PENCIL POINTS and we want every reader of this paper to know that we never intentionally publish the advertising of any manufacturer who is not worthy of their confidence and patronage. While the growth of the advertising section makes it possible for a publisher to extend his reading pages and present to the readers more and more interesting and valuable material, it is not our intention to exploit the purchasing power of the architectural profession either by publishing the advertisements of unreliable firms or by expanding the advertising section beyond reasonable limits.

Just a word as to the quality of the material appearing in our advertising pages. Many firms are having their advertisements prepared either by or under the guidance of trained architects, renderers and draftsmen. Much of the material appearing in these pages is not only attractive but, if properly studied and used, of immediate value to the men preparing specifications or working out the details of buildings over the drafting-board. Still further progress can and, we believe, will be made in this direction, and we ask our readers to co-operate with us and with our advertisers in order that the average standard of the advertisements appearing in our pages may be still further raised. We shall be glad to receive communications either criticising or expressing approval of any of the advertisements we publish. If anyone has an idea for improving the advertising section in any respect we shall be most pleased to receive it.

Let us repeat that the future success of PENCIL POINTS is intimately bound up with the quality of service rendered to the advertisers as well as the subscribers and we want the advertising section to be just as interesting and valuable to the profession as the editorial and other reading pages.

PENCIL POINTS



Drawing by H. Van Buren Magonigle.

Design Submitted by Mr. Magonigle in the Indianapolis War Memorial Competition.

MASTER DRAFTSMEN, X

HAROLD VAN BUREN MAGONIGLE

M R. MAGONIGLE won the Gold Medal of the Architectural League of New York in 1889. A few years later the publication of some of his line drawings caused attention to be again attracted to his work. Draftsmen who remember the line drawings of the details of Madison Square Garden and the Erechthion that were published during the early nineties in the *Architectural Review* know what they knew, then, that the initials "V. B." which parted Harold and Magonigle must have stood for *Van Buren*. For it was certain that that was the "middle name" of anybody with the infinite capacity to go through the swat of putting in all the detail with such degree of perfection from start to finish. With the publication of those drawings, the plates in Buhlmann and in my copy of Vignola lost caste. The paragon of line drawing of architectural detail became Magonigle's drawings. That was thirty or more years ago, but I have yet to see anything of the kind to surpass them. The earlier drawings of Madison Square Garden were

made while Mr. Magonigle was in Boston where he went on purpose to win the Rotch Travelling Scholarship which he annexed to his honors in 1894. Before that he had spent a few years in the office of McKim, Mead and White and, earlier still, some time in those of Charles C. Haight and Vaux and Radford. The drawings of the Erechthion were made while he was abroad on the scholarship. These drawings show personal qualities of imagination, feeling, and temperament seldom observable in work done mainly with the T-square and triangle; but when mouldings or much ornament is drawn the character of the man behind the draft is as evident in his line as in his handwriting. From his very early work onwards the character displayed in Mr. Magonigle's drawings is at once emotional and sincere. As with his designs his drawing is

marked by an individuality much more easily detected than explained. Such influences as other men have exerted upon his work are to be found only in a collective sense. They may be said to be French and Roman but not of any individual Frenchman or Roman, nor of any particular style. He has selected his own path and created and developed a style of his own. One that holds to high scholarship and thoroughness of workmanship and achieves originality in spite of itself rather than on purpose of seeking it.

After his sojourn of two years in Italy, Greece, France and England he returned to New York, re-entered the office of McKim, Mead and White and, in 1897, began practice as an architect. During two years he was associated with Evarts Tracy in the firm of Tracy and Magonigle and another two years as head of the office of Schiekel & Ditmars. The past twenty-three years he has practised alone, except for a short association with Mr. H. W. Wilkinson. As a designer of important monuments he has achieved a leading position among modern

architects. His "Maine" and "Firemen's" monuments at New York; McKinley Monument at Canton, Ohio; Schenley Fountain, Pittsburgh; Peace Memorial at Kansas City and his winning design for the Robert Fulton Memorial Watergate at New York are works of architecture distinctly American. They are of a kind of architecture that will survive and find place in architectural history, and are, therefore, worthy of the excellent representation which Mr. Magonigle gives them in his masterly drawings.

The economic and social conditions of our times and country tend to separate the artist from his best possible endeavors, by calling upon him to accept inferior assistance in order to produce work quickly, thus forcing him to become a business man leading, or trying to direct, others in the production

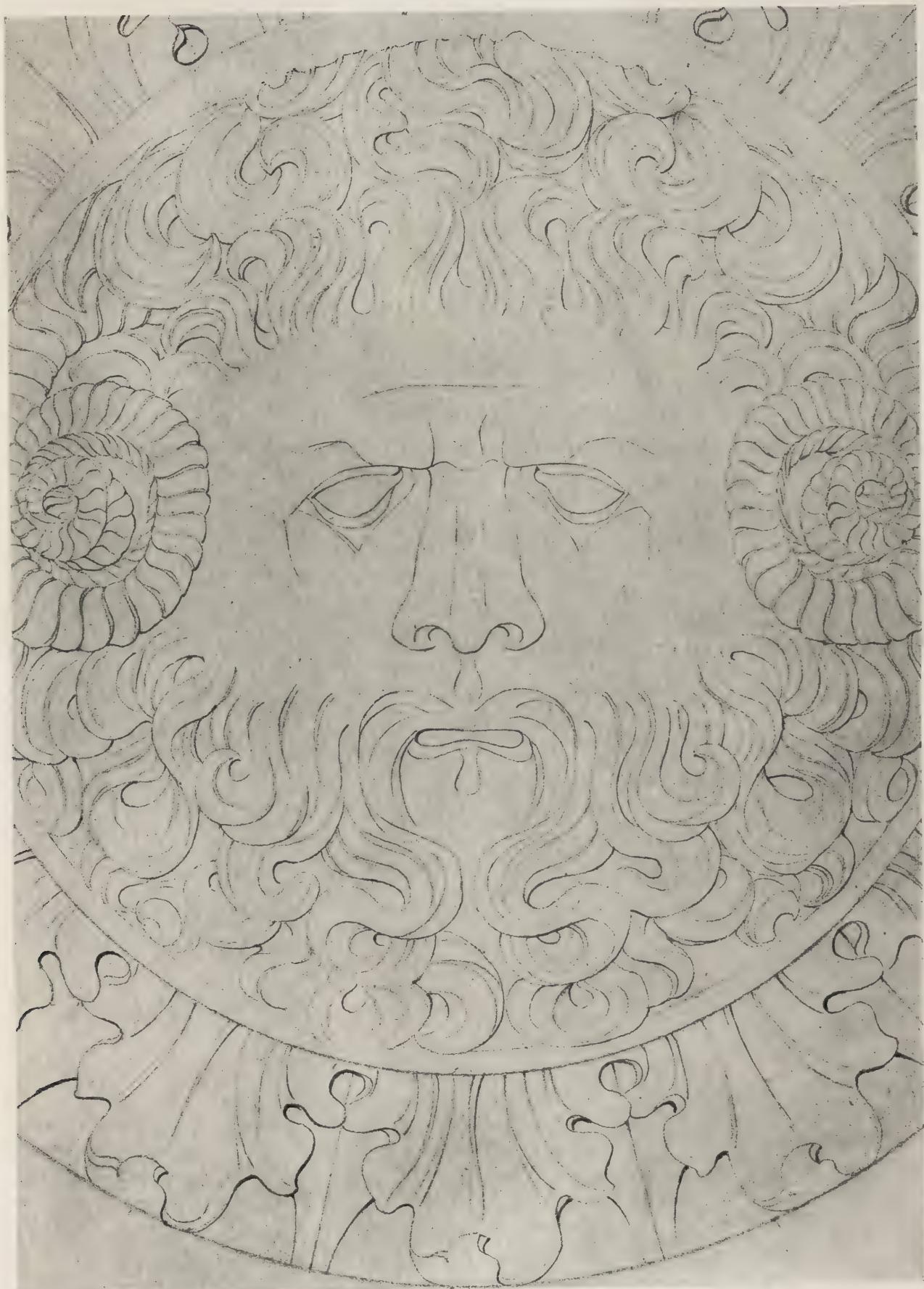


Harold Van Buren Magonigle.



*Water Color Drawing by Harold Van Buren Magonigle.
St. Mark's, Venice.*

PENCIL POINTS



Drawing by Harold Van Buren Magonigle.
Rosette in Frieze of Temple of Vespasian, Forum Romanum. Portion of Drawing Reproduced at
Actual Size of the Original.



*Drawing by Harold Van Buren Magonigle.
Seal of the American Institute of Architects.*



*Pencil Drawing by H. Van Buren Magonigle.
Choir Stalls, Amiens.*



Water Color Drawing by Harold Van Buren Magonigle. Villa Lante.



Reims.



Durham.

Water Color Drawings by Harold Van Buren Magonigle.

PENCIL POINTS



*Drawing by Harold Van Buren Magonigle.
Portion of Design Submitted by Mr. Magonigle
in the Nebraska State Capitol Competition.*

PENCIL POINTS

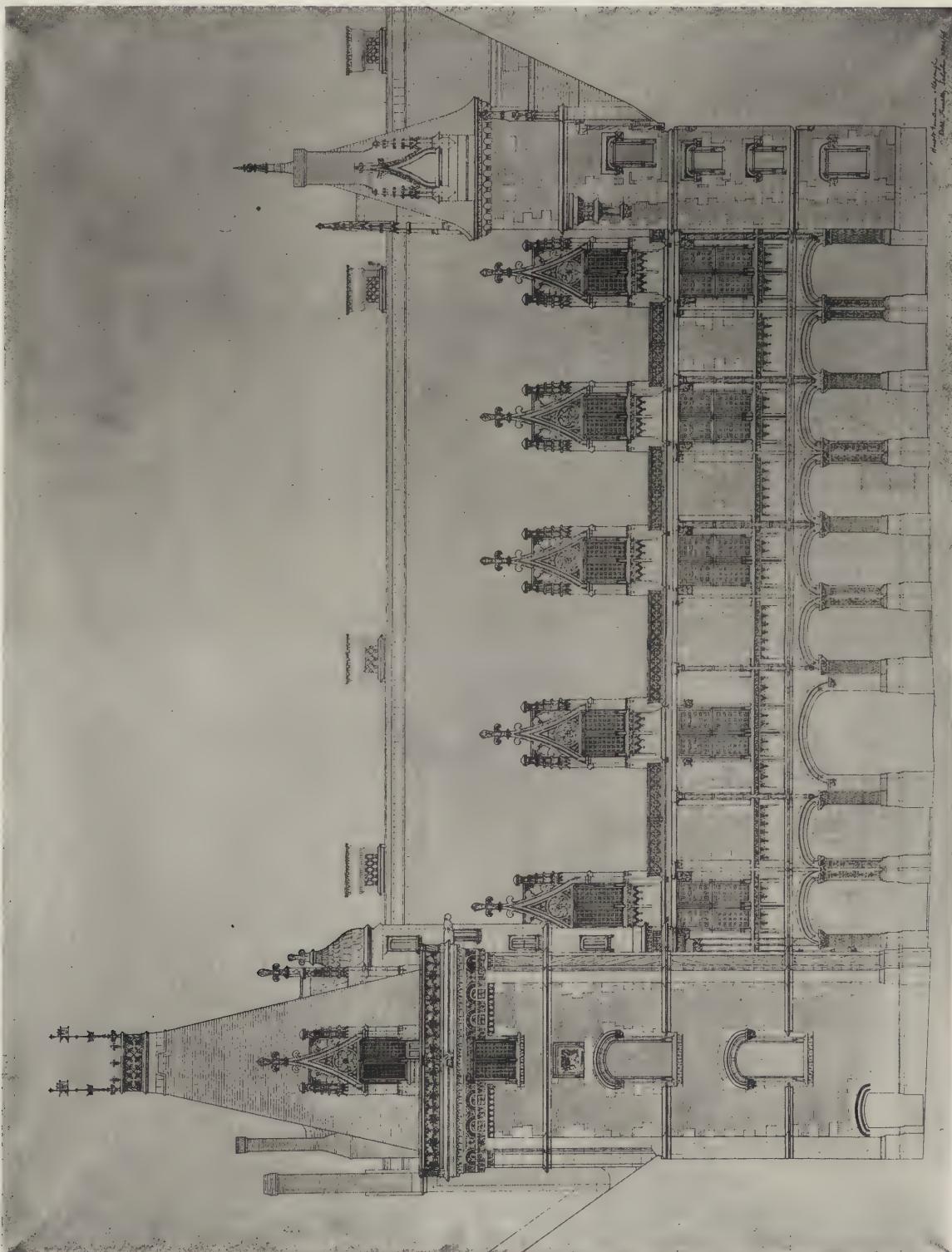


Drawing by H. Van Buren Magonigle. Portion of Elevation of Mr. Magonigle's Design Submitted in the Nebraska State Capitol Competition.

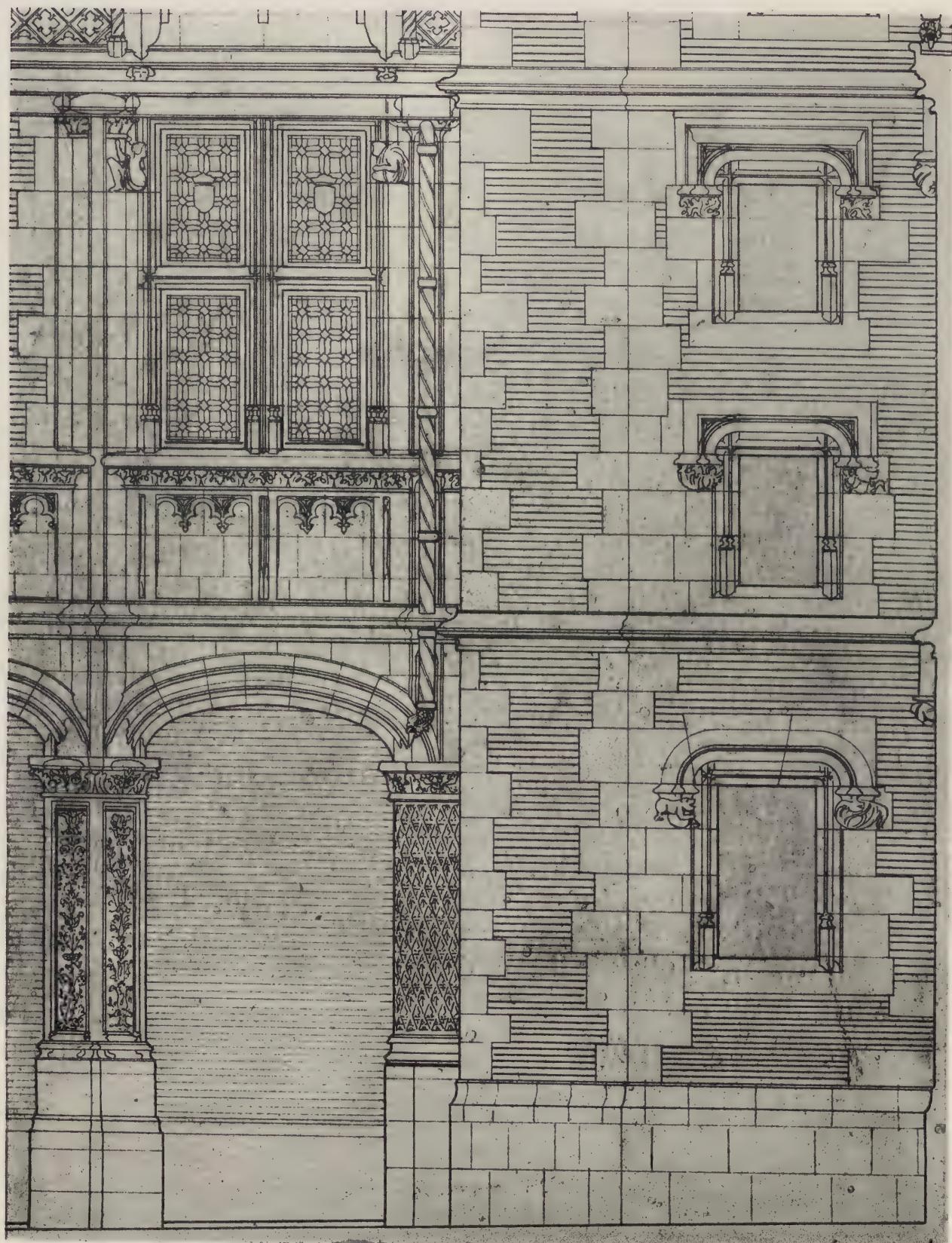


Drawing by Harold Van Buren Magonigle.
Loggia di S. Paolo in Florence. Portion Reproduced at Actual Size of the Original Drawing.

Drawing by Harold Van Buren Magonigle. Louis XII Wing, Chateau of Blois.

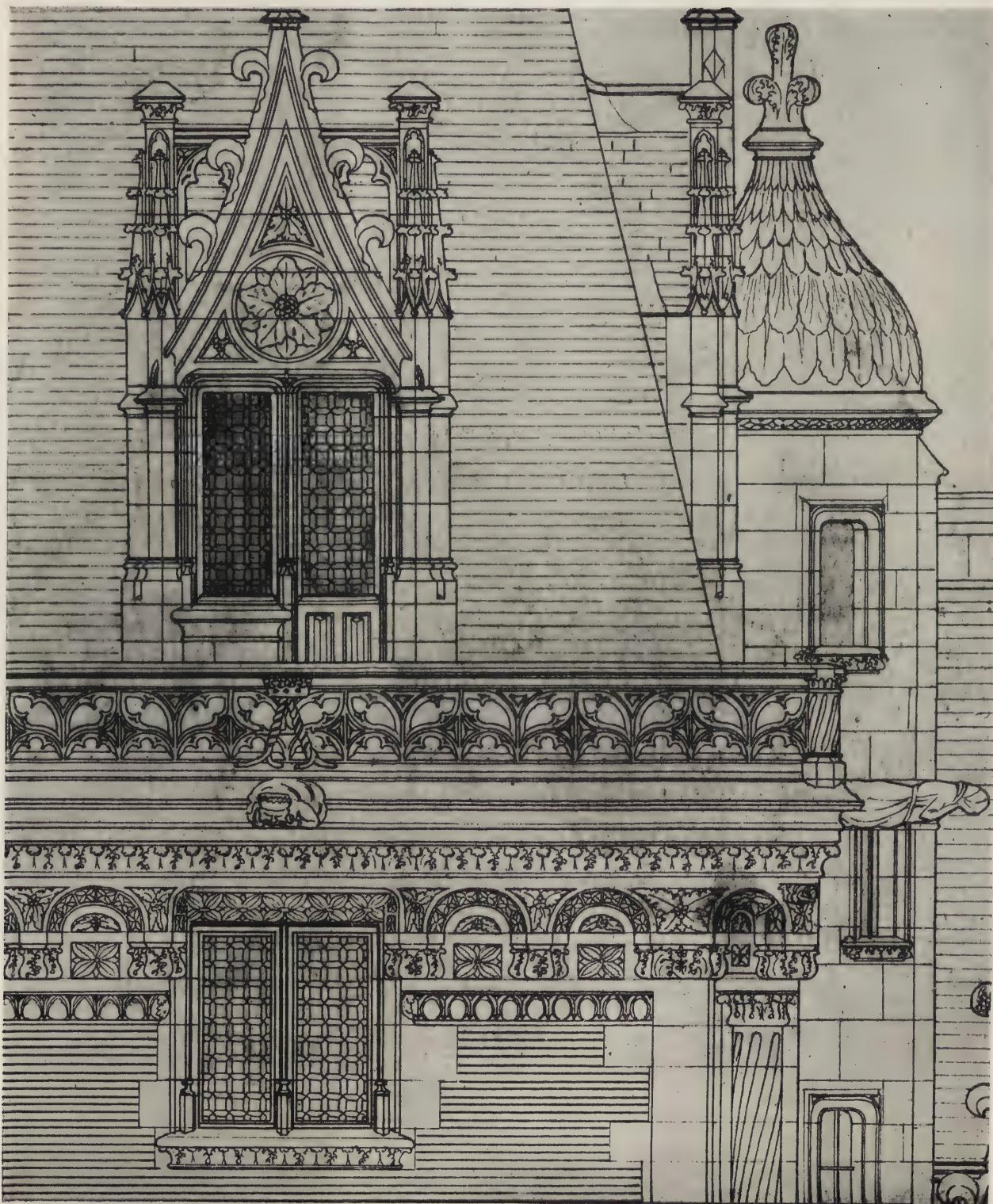


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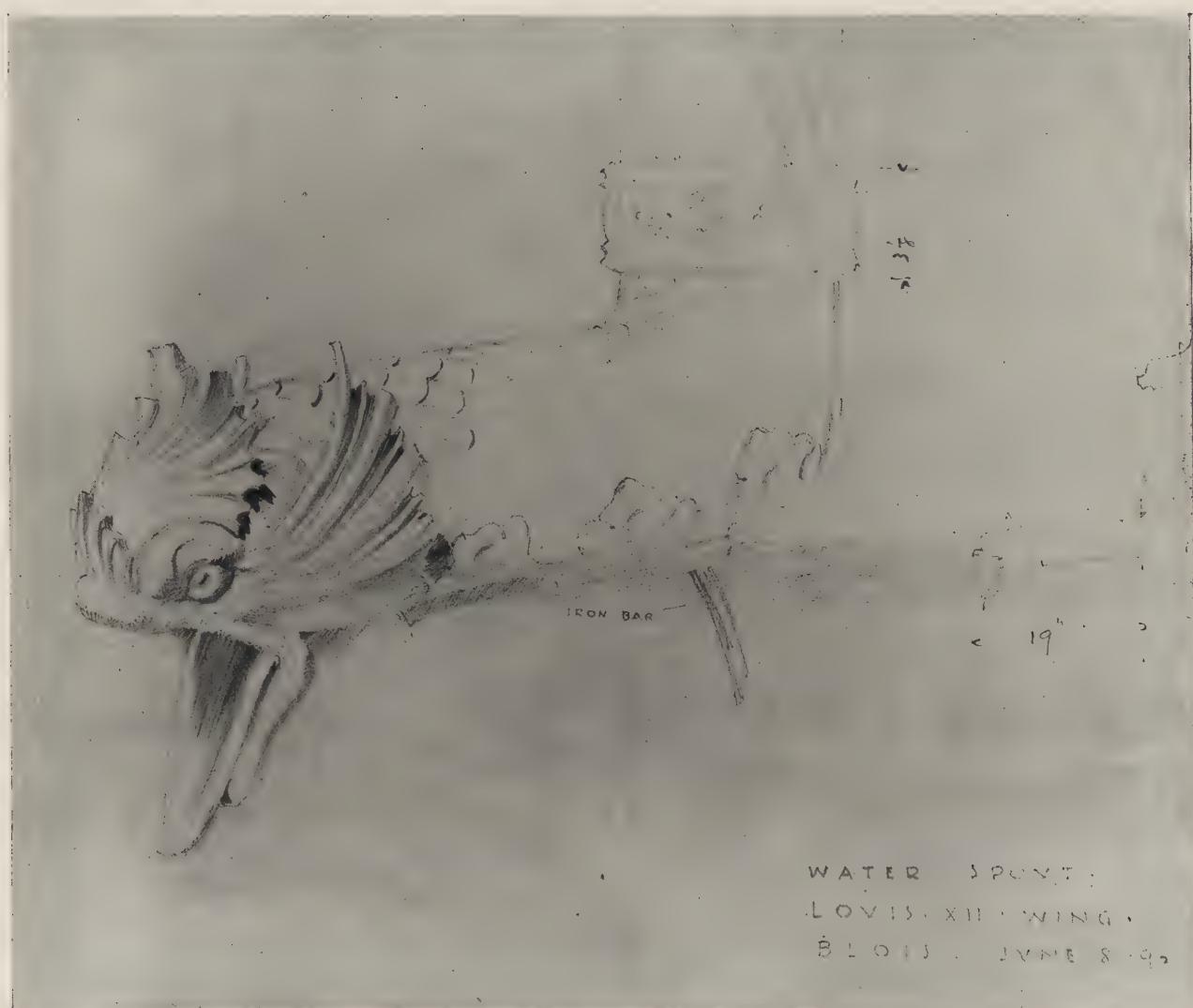
Drawing by Harold Van Buren Magonigle. Portion of the Louis XII Wing, Chateau of Blois, Reproduced at the Actual Size of the Original Drawing.

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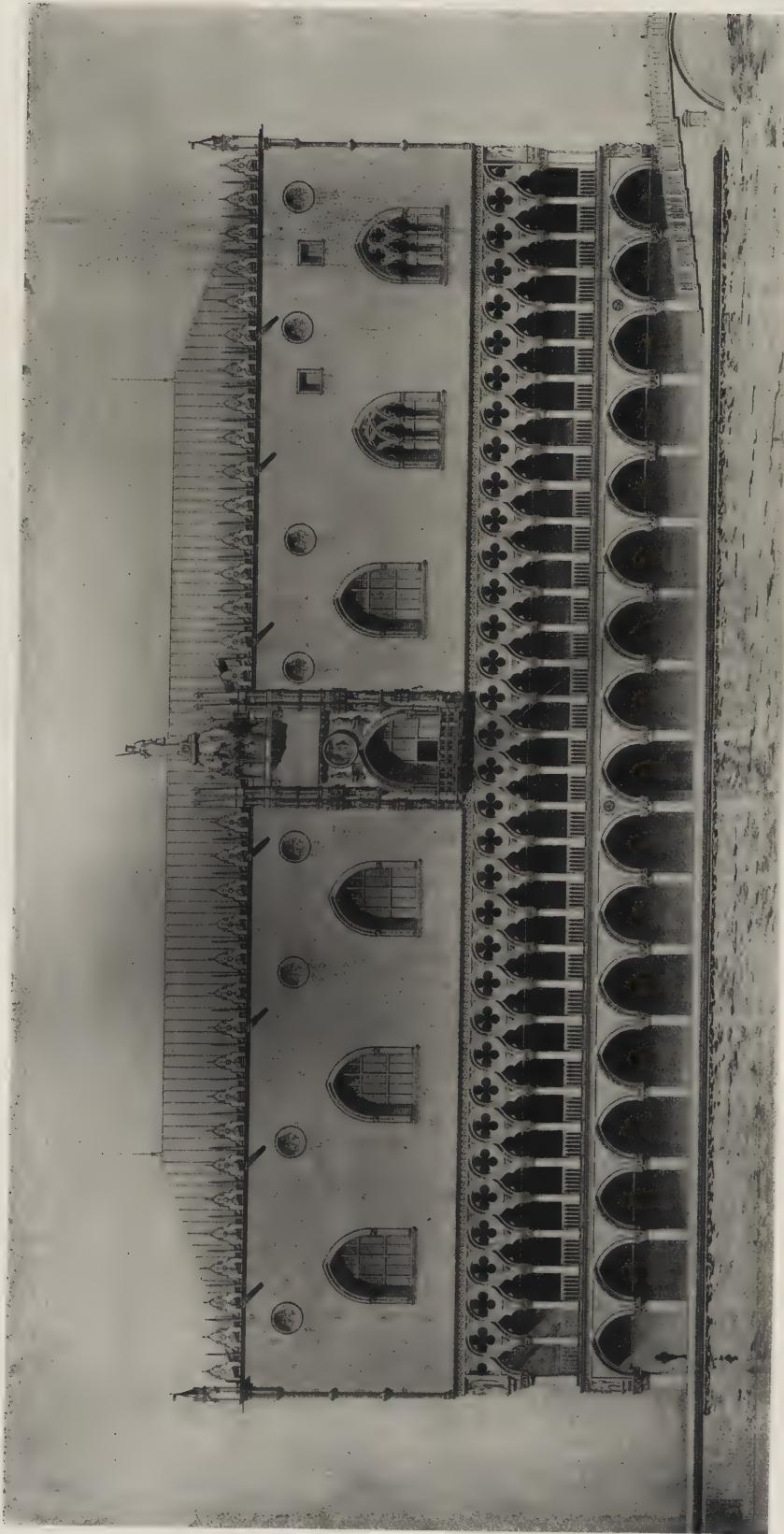


Drawing by Harold Van Buren Magonigle. Portion of the Louis XII Wing, Chateau of Blois. Reproduced at the Actual Size of the Original Drawing.

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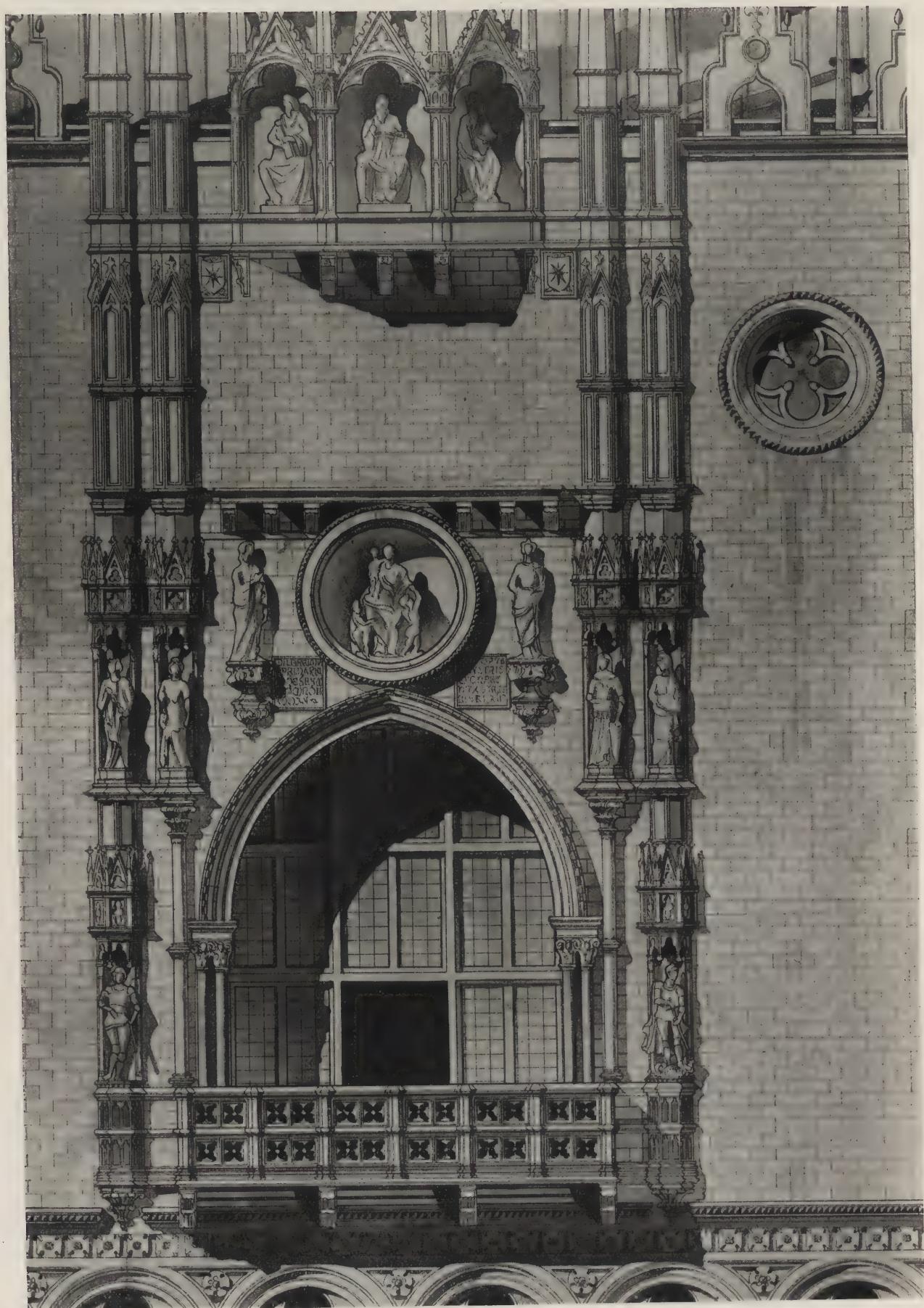


From Mr. Magonigle's European Sketch Book. Water Spout, Louis XII Wing, Chateau of Blois.



Drawing by Harold Van Buren Magonigle, the Doge's Palace.

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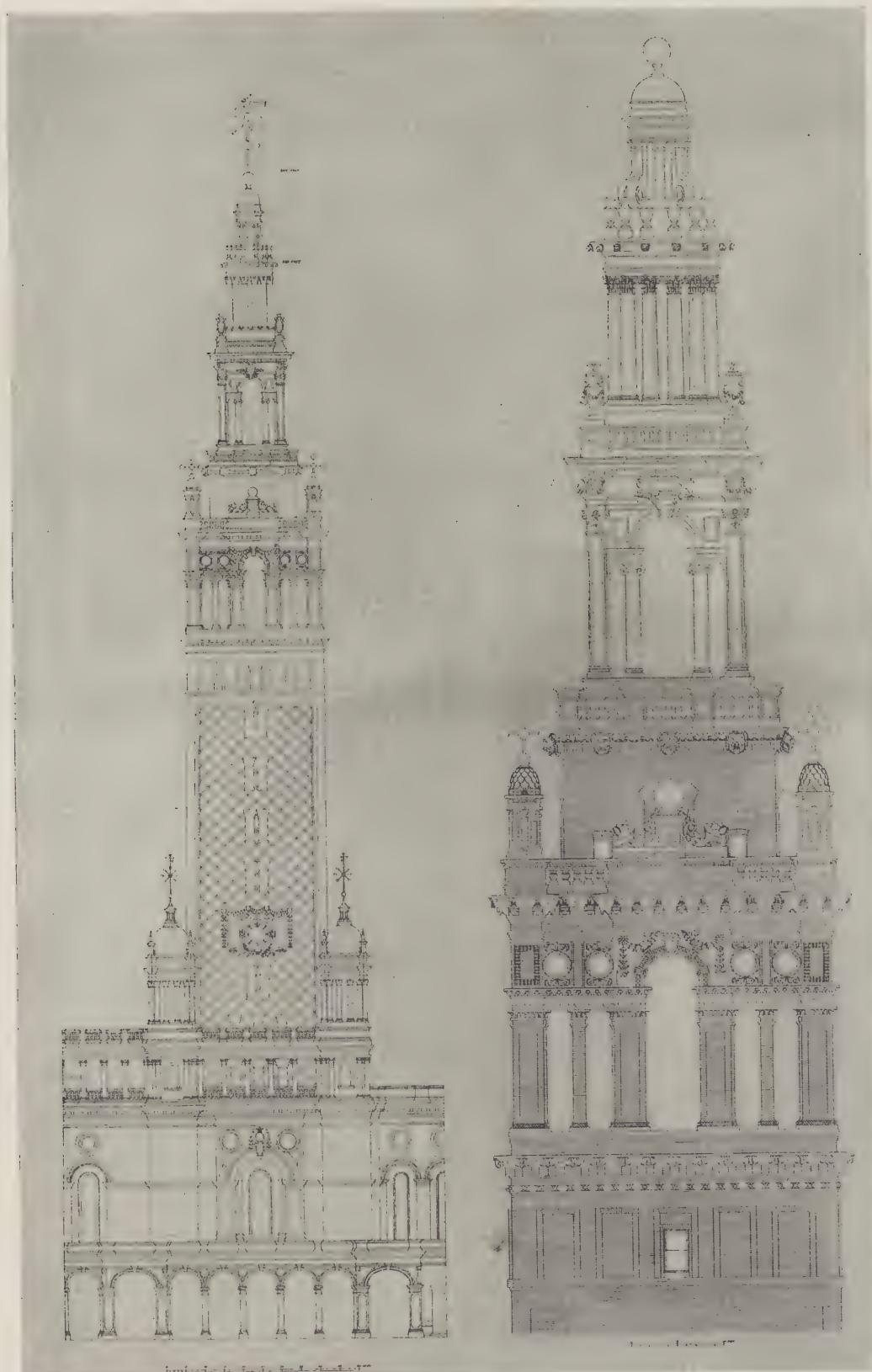
Drawing by Harold Van Buren Magonigle. Portion of the Doge's Palace. Reproduced at the Actual Size of the Original Drawing.

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Drawing by Harold Van Buren Magonigle. Portion of the Doge's Palace. Reproduced at the Actual Size of the Original Drawing.

PENCIL POINTS



Drawing by Harold Van Buren Magonigle. Elevation of the Tower of The Madison Square Garden, New York. McKim, Mead & White, Architects.

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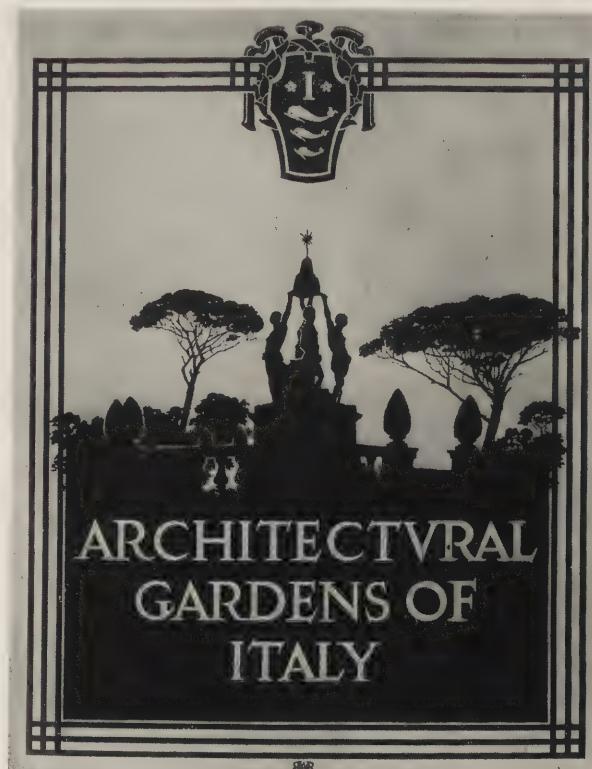


Drawing by Harold Van Buren Magonigle. Design submitted by Mr. Magonigle in the Nebraska State Capital Competition.

of work up to the best standards of their abilities instead of his own. The time demanded to take care of "business-like" correspondence and "attention" to business people—especially those who do not understand that "art is long"—distracts the architect from work of greater value and diminishes his own true use and value to his clients.

But such conditions may be overcome, and are mastered, when the artist cares enough about the quality of his work to limit that which he will undertake to only as much as he finds time to personally design. And to "personally design" means that which he personally *draws*. The more drawing the designer can do the better the result will be (provided, of course, that the designer or architect is as able as such assistants as he can employ!). Mr. Magonigle carries this principle very far; and of his designs, not only are the *general* masses and *general* ideas of the plans his, but also the complete working out of every important detail. Here we find an architect of the kind that produced the great works of the Renaissance in Italy, skilled in the contributory decorative arts of painting and ornamental sculpture and able to show by clear, forceful draftsmanship—whether by line, brush or modelling tool—just what it is that he desires to bring into existence. Occasionally a large part of detail drawing has to be done by architects of more

than ordinary abilities through lack of verbal expressiveness—but in this instance no such reason holds good, for Mr. Magonigle has shown literary talent of no mean order in the papers, articles and books he has written. Quite the best articles I have ever read—at least so far as any benefit was con-



A Cover Design by Mr. Magonigle.

*We owe it to Mr. Swales and to ourselves and our readers to observe that Mr. Swales' articles on the "Technique of Rendering," which have appeared in PENCIL POINTS (one remains to be published) were originally written before Mr. Magonigle's book was published. When this book came out Mr. Swales revised his manuscripts in order to avoid duplication. The articles as revised, therefore, supplement Mr. Magonigle's book by specific examples with illustrations of technique at the actual size of the original drawings.—Ed.

PENCIL POINTS



A Bit from One of Mr. Magonigle's Sketch Books.

cerned—upon making working drawings were some that he wrote several years ago, and published in the old *Brickbuilder*. *His book on *Architectural Rendering in Wash* is, as I have stated in other articles, a useful guide which is as necessary to the young draftsman's equipment as his scale or compasses. As Mr. Thomas R. Kimball has so well stated in his preface to that book, it "presents its author in the diverse capacities of architect, draftsman, painter and writer. Incidentally it suggests other qualifications of this many sided personality Posterity will come in for a great acquisition in that through this work there will be recorded what otherwise might one day join the 'lost arts,' for architectural rendering is today at its zenith, indisputably an art in itself, and a great one."

More than most other of the subjects of this series of articles, Mr. Magonigle has stressed the value of academic training and rendering. This he has not done to the exclusion of free expression in drawing and sketching; but both by his works and writings has done a great deal to prove that the two methods—free and academic—are supplementary, in the work of the architect. Freedom is helped by academic theory and experience, and is not, as some would have us believe, "shackled" by it. The naturally brilliant artist may train either at school or by his own method or system, but train he must, to ever acquire a valuable means of self-expression.

The great number of draftsmen who are not exceptionally fitted for the field of art, must inevitably train with redoubled energy and determination to gain any recognized place in it. To those who have not the advantage of the direct advice and personal assistance of a good teacher, Magonigle's works and writings are of incalculable worth. Thoroughness is *sine qua non* with him—and that is something that none of us can afford to ignore

though the tendencies of the times call for little enough of it in current practice. Such attention to the finer side of architecture and service to its function as a fine art has developed an unusual, even rare, practice on Mr. Magonigle's part. He has produced no cheap or speculative buildings. His practice in architecture, like his drawing, is of a solid substantial character. His spare time has been filled in with making studies for things attractive to the high mentality and temperament of an artist. The design of furniture, book and magazine covers, seals, pottery, typography, page illustration, even to the beautifying of the advertising pages of magazines, water color sketches, oil paintings and various process work. Anything and everything that can interest or appeal to the brilliant draftsman he has taken into his field of work. What a large field it is!—but how well he has kept it free from all things "cheap" or vulgar!

FRANCIS S. SWALES.



Drawing by H. Van Buren Magonigle. Portion of Design Submitted by Mr. Magonigle in the Indianapolis War Memorial Competition.

PENCIL POINTS

VOL. VI, No. 3

PLATE IX



PENCIL DRAWING BY THEODORE de POSTELS
THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY

On the other side of this sheet is reproduced a pencil drawing by Theodore de Postels which gives an unusually effective and pleasing presentation of the design for the completion of the Cathedral of St. John the Divine, New York. This view emphasizes the commanding position of the Cathedral on the rocky heights above Morningside Park and gives full value to the great spire over the crossing, showing the towers of the west front as well as the other parts of the building in their proper relation as parts of the whole design.

PENCIL POINTS

VOL. VI, No. 3

PLATE X



"LEDA," PAINTED SCREEN BY ROBERT W. CHANLER

The painted screen, the design of which is shown on the other side of this sheet displays not only one of the most interesting of Robert W. Chanler's compositions but reveals the artist's mastery of his brush in the firm, vibrant lines of the plumage of the birds, particularly. The technique is especially worthy of study.

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PLATE XI



PENCIL DRAWING BY EDWARD C. CASWELL
SEGOVIA, SPAIN

Another of the delightful sketches made by Mr. Caswell on his trip through Spain last summer is shown on the other side of this sheet. The freedom of drawing, the openness and spontaneity are well suited to the expression of the spirit of the subject. Other sketches by Mr. Caswell will be found on plate pages of recent issues of this journal.

VOL. VI, No. 3

PENCIL POINTS

PLATE XII



STUDY BY GEORGE BELLOWS

One of the best of George Bellows' life studies is reproduced on the other side of this sheet. Note the strength of the drawing and the effectiveness with which the salient characteristics of the pose have been presented, for instance the lift and firmness of the chest, the way in which the abdomen has been retired back of the mass of the upper leg, the sense of completed movement in the arm thrust under the head, all done with the greatest simplicity.

DESIGN IN THE DRAFTING ROOM, II

BY JOHN C. BREIBY

IT IS interesting to look back through the history of art, observing at each period how it was always the beautiful handmaid and companion of utility and how as each step of progress was taken their companionship became more and more close. Through different periods of history one has perhaps lagged a little behind the other, but at all times have the companions of utility and art expressed in truthful manner the characteristics of their creators; the more perfect their companionship and union, the more clearly will be reflected the contentment of mind and works of organized society.

This is an age of commercialism and practicality, but also the age for opportunity to combine utility with adornment and beauty. How can this be accomplished, may be asked? By making the one harmonize with the other and each express a combined meaning of unity.

Perhaps some of the "temperamental designers" will chafe a little under the yoke of having to meet practical and commercial conditions, in believing that this will necessitate the stepping aside from old traditions. This should not be so nor have old traditions lost any of their charming and inspiring influences. What is more restful and refreshing than to look over some old architectural book? It is impossible to impress too strongly the need of this for mental stimulus and architectural health, do this frequently, actually live with the work portrayed. Many draftsmen are so occupied with the daily "hum drum" of life and neglect to take advantage of this tonic. The writer knows many draftsmen and has observed how marked is the

difference in the attitude and work between those who take delight in and make the effort to refresh the memory often with a book of reproductions, and the draftsmen who are contented only to think architecture when paid for the time. The most successful doctors are the ones who are constantly in touch with the profession and daily renew their efforts to be on the look out for fresh sparks to kindle the flame, lighting and showing the way to new and unexplored regions.

The practice of architecture is a profession and everyone engaged with it should uphold its dignity and its value for the practical purposes and the lofty benefits derived in beautifying the housing of the individual and collective society, the architect with his assistants should always be on the alert for unexplored paths for the use of materials and their possibilities for architectural usefulness.

It is for the good of design in the drafting room that everyone engaged in the work appreciate good his individual inclination may be. To keep in closer touch with design always keep "an eye to the weather" and watch for suggestions. Even in the daily journeys, notice some street intersection and the surrounding buildings or other parts which may stand out, good or bad; observe the architectural solution or if there is need for one, imagine a problem to solve, if possible sketch. Advice need hardly be given to take active interest in architectural or sketch clubs if such are available. The architect and draftsman must make himself and work known through the constant use of the pencil—this is the first and



Figure 5. Interior of "The Playhouse," Detroit, Mich.
C. Howard Crane, Architect, Elmer George Kiebler,
Ben A. Dore, Associates, Detroit.

design no matter how practical

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Fig. 1. Building taken at an Angle of 45° at the eye level of a man standing on the street. Model shown on this and other pages by Maxwell H. Keck, architectural sculptor. C. Howard Crane, Architect, Elmer George Kiehler, Ben A. Dore, Associates, Detroit.

PENCIL POINTS



Figure 2. Building taken at an Angle of 45° with the eye level raised to half the height of the building.

most important work, but behind that pencil must be architectural knowledge—and that is vast—alas the individual can master so little, but that part must be mastered well. There has been no famous architect who has not at all times taken lively, active interest in design in the drafting room. A difference must be observed between some successful architects and all famous architects. Some successful architects flare up into prominence with some particular large job or jobs and that is all. A famous architect will perhaps rise rapidly and achieve prominence, but will live forever as a star of the first magnitude. The difference is that the first kind withdrew from keen interest in actual draftsmanship while the famous will always draw.

In the organization of architectural offices economy is an important factor and it is in the drafting room where profit can be made or wasted (the practical and remunerative side of the profession must be considered). As drawings are merely instruments of service for use in obtaining ultimate permanent results, their making is always an over-

head cost and the sails must always be trimmed to avoid waste.

A danger lies in the commonly expressed phrases "leave it to the modeler or shop drawings" or that "this can be taken care of at the job," this particularly applies to the large-scale drawings or full size details. Truly enough, much of the work is a matter of repetition or showing work of standard types. To make drawings showing such work in laborious representation is a waste of time and energy. Great care should be exercised, however, in what portion of the work should be left to the modeler or to shop drawings for definite results affecting practical results or design. Poor execution or design will re-act against the architect and not against the modeler or shop.

The period has changed and the progress of architectural design is constantly undergoing new

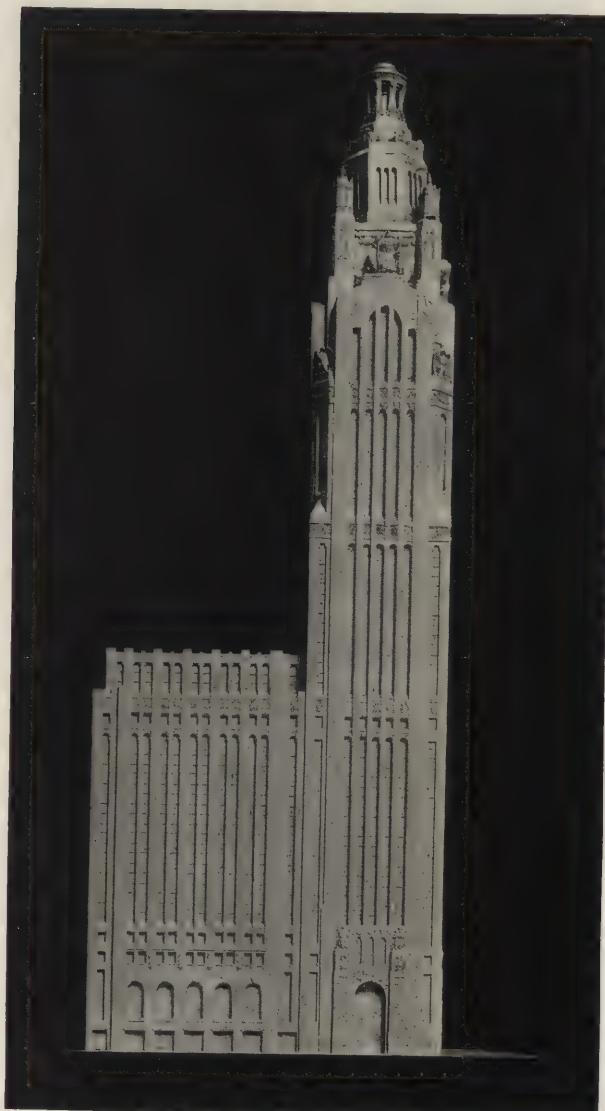


Figure 3. One side of the Building with the onlooker standing in the street.

PENCIL POINTS

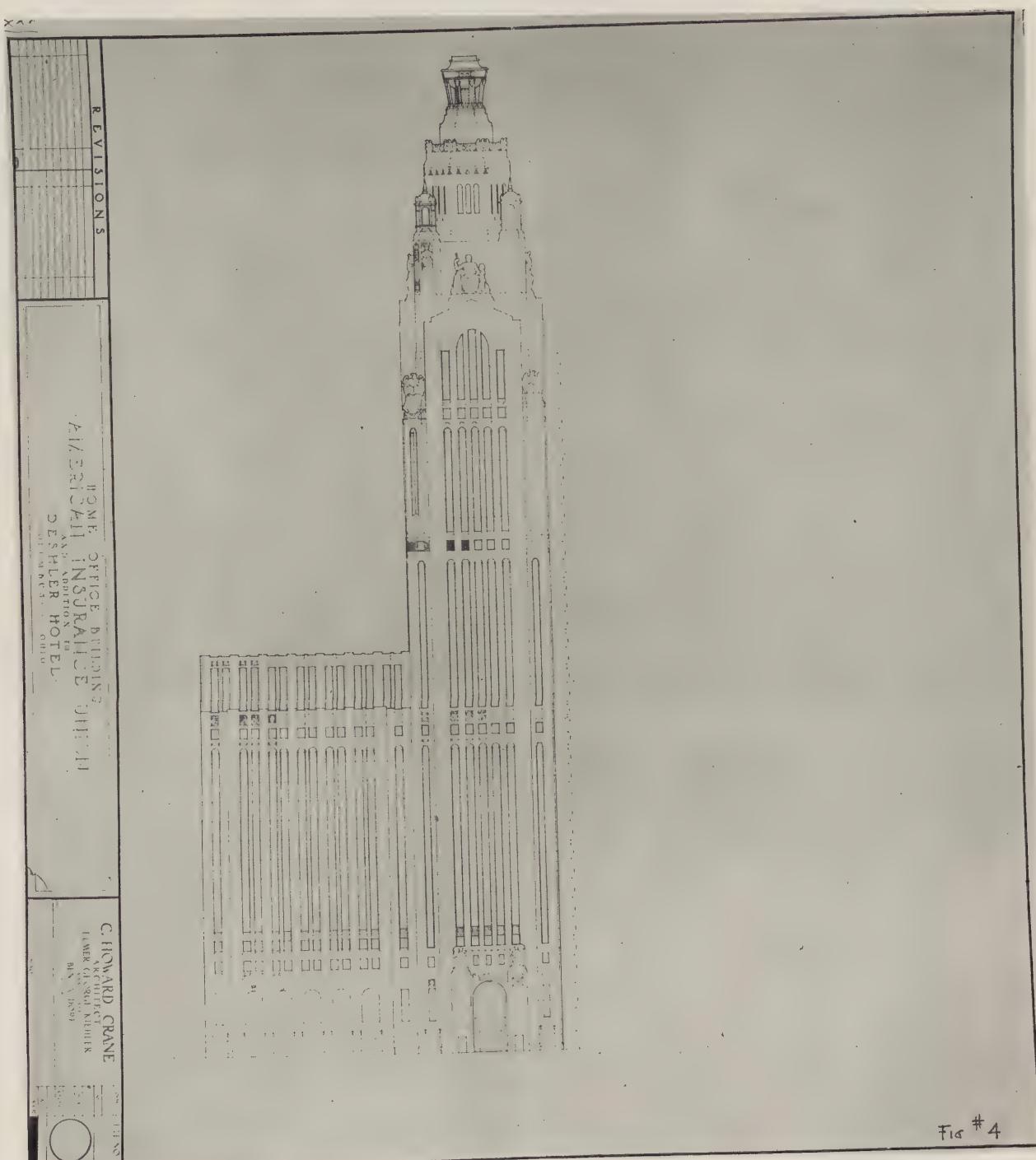


Figure 4. Working Drawing Elevation for Building Shown in Views of Model on page 78 and 79.
C. Howard Crane, Architect, Elmer George Kiehler, Ben A. Dore, Associates, Detroit.

PENCIL POINTS

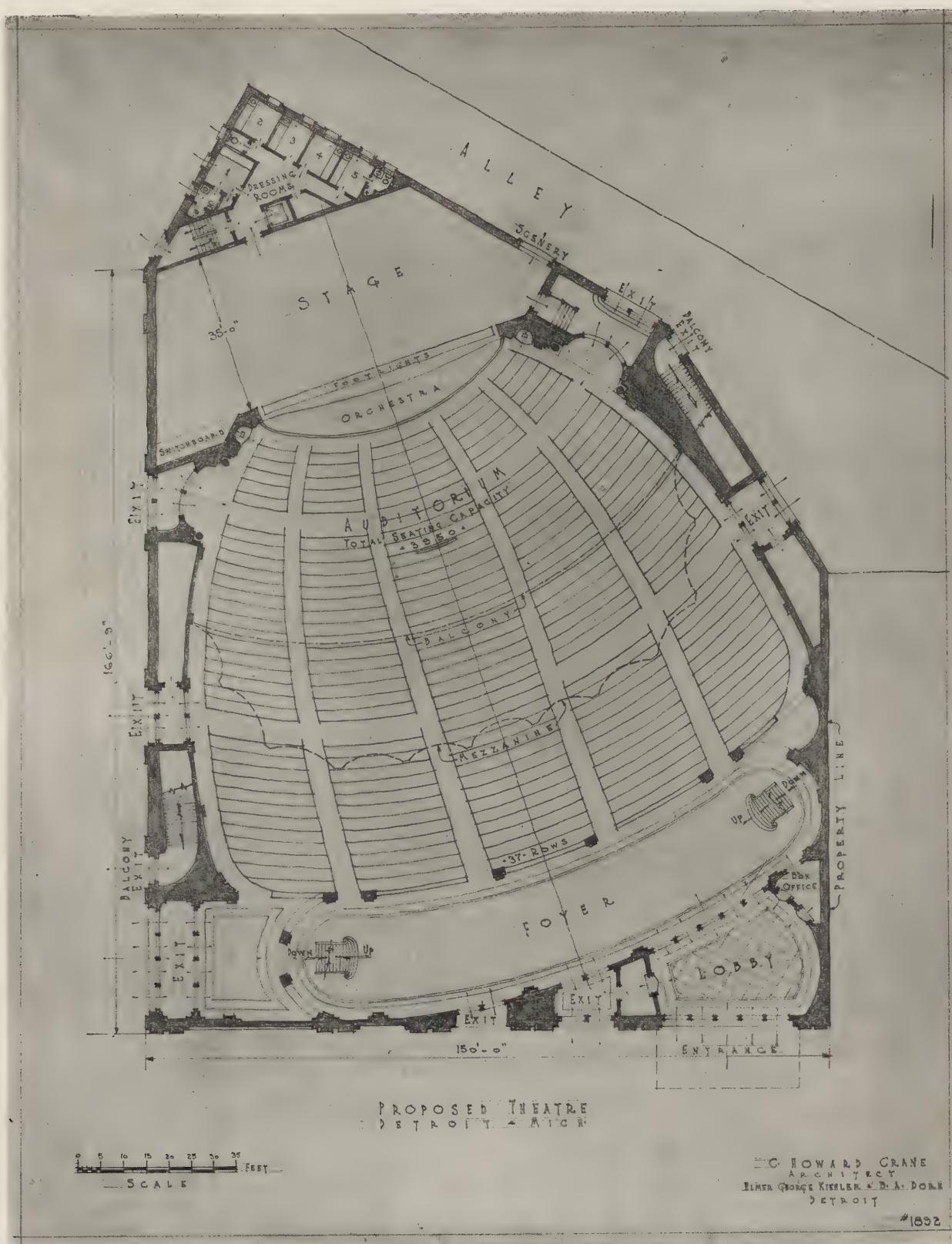


Figure 6. Study for a Proposed Theatre to be erected in Detroit, Mich. C. Howard Crane, Architect.
Elmer George Kiebler, B. A. Dore, Associates

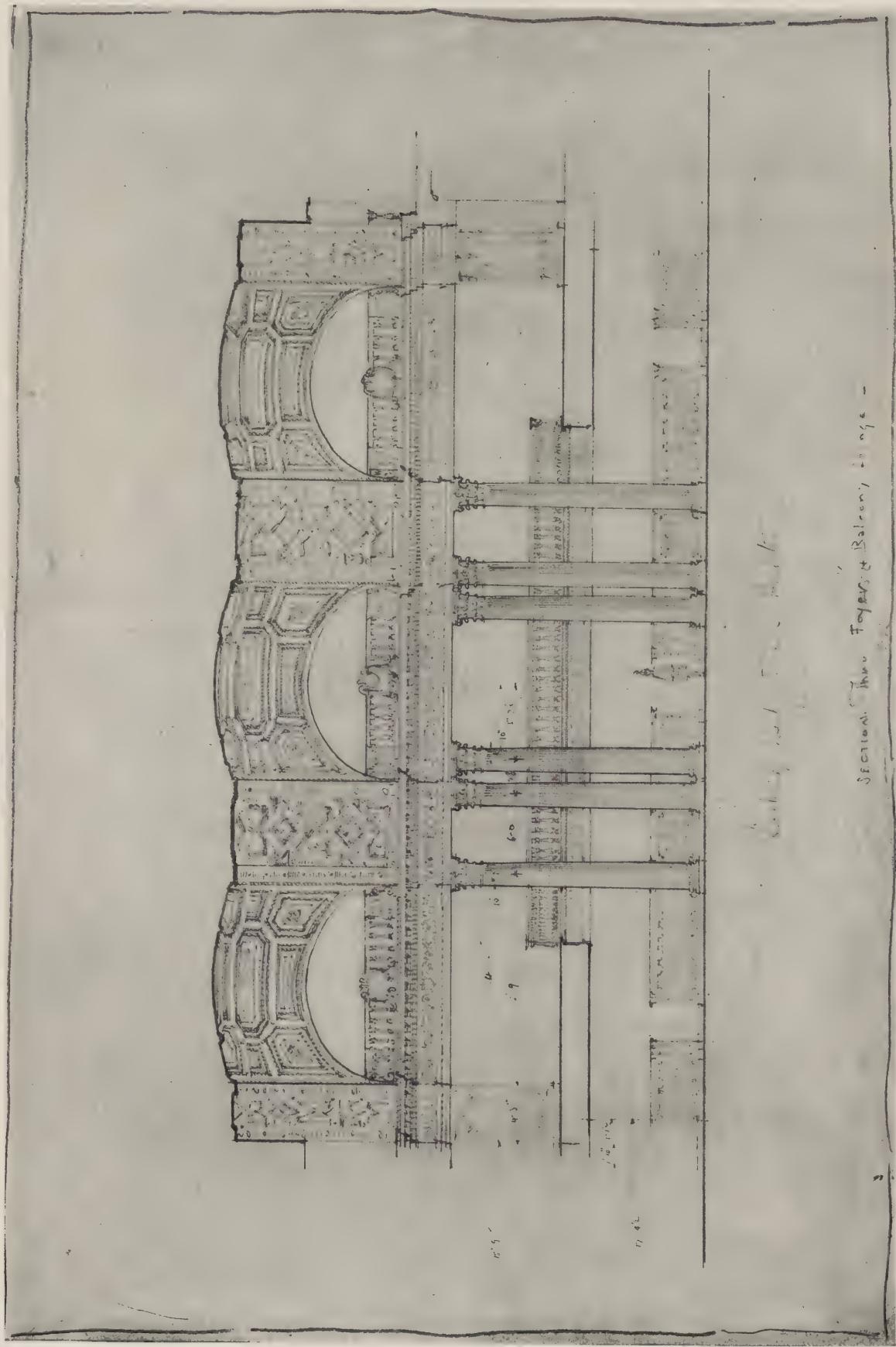


Figure 7. Design Study for Auditorium. C. Howard Crane, Architect, Elmer George Kiebler and Ben A. Dore, Associates, Detroit, Mich.

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development, perhaps it may be said that the age for using marble and stone as structural materials has passed, steel and concrete have taken their places. Lavish, extravagant use of material is prohibitive and not in the taste of the time, the days of idleness, powdered wigs and silken knee breeches are gone. Comfort and beauty, even luxury is desired but it may not be obtained from sources of over taxation and heavy burdens laid upon the national backbone. The workers of today are equal heirs to all beauties and comforts of home and education. The works of good architecture are equally theirs in sharing the benefits resulting therefrom and in partaking of its enjoyments.

Rules cannot be set for good design in the drafting room. Sketches and drawings must be made quickly, neatly and intelligently in order that they may be understood, not only as drawings but also for the sake of the work which will result. The client must be able to understand, the contractor must know how to execute the work or unhappiness will be the outcome. Design in the drafting room is the beautiful bridge by which the architect spans the stream from the shore of architectural inspiration and conception to the side of building construction and permanent

architectural achievement and it joins the hands of the two companions, Utility and Art.

In the February issue of PENCIL POINTS were shown the development and progress in the design of a building now being erected in Columbus, Ohio. Some mention was made of the value in having a scale model studied in conjunction with studies by drawing. This phase of co-ordinated study should be encouraged, its value cannot be over-estimated. In this issue three photographs of the scale model are shown illustrated by Figures 1, 2, 3. Figure 1 shows a view of the building taken at an angle of 45 degrees at the eye level of a man standing on the street. Figure 2 is a view taken at 45 degrees with the eye level raised to half the height of the building and Figure 3 shows one side of the building with the onlooker standing on the street. The benefit obtained from model study is obvious. If the reader will observe the design of the elevation from Figures 1, 2, 3 illustrated in the February issue and the photograph illustrated herewith it is clearly seen how step by step the design has taken structural form, horizontal tie bands brought out giving a feeling of desired lateral strength without disturbing the slenderness of vertical design.

(Continued on page 91)

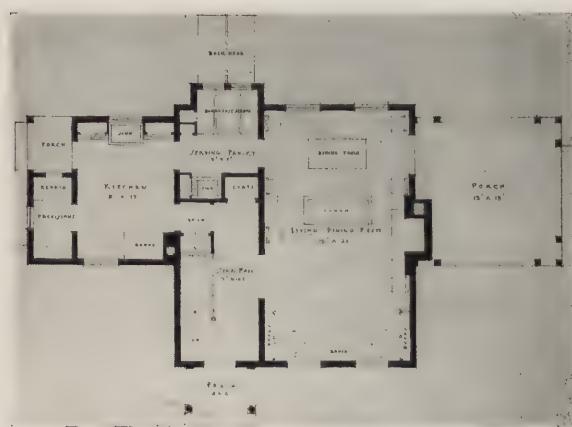


Figure 8. Talking Sketch, Lounge in "The Playhouse." C. Howard Crane, Architect.
Elmer George Kiebler, Ben A. Dore, Associates, Detroit, Mich.

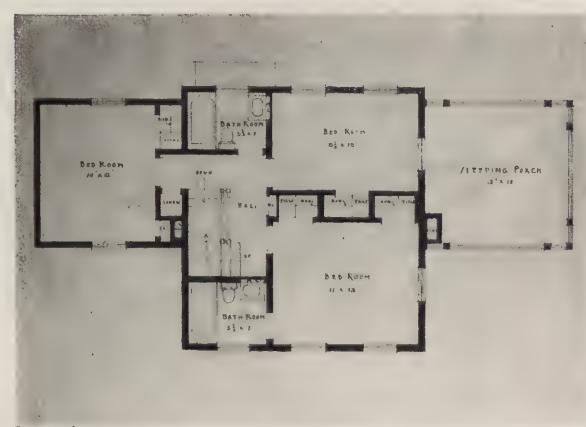
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Rendering by Chester B. Price.



First Floor Plan.



Second Floor Plan.

A Suburban House. Oswald C. Herring, Architect.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Professor in Charge School of Fine Arts, we quote the following items:

"Two of our sculptors have been developing interesting sketches for War Memorials. Stevens, senior sculptor, has presented his idea for the setting of his heroic figure of America for the Belleau Wood cemetery. His figure, which has hitherto seemed cramped with a reminiscent quality, now carries more freedom of spirit with a consequent approach to a successful feeling for the American theme he has chosen. Alvin Meyer, second year sculptor, has projected a scale model for a proposed monument to be presented to Italy by the American Government to commemorate the American lives sacrificed on Italian soil during the World War. Meyer is convalescing satisfactorily and his industry seems unabated.

Marceau, Newton and Deam have kept very close to their studies carrying on their last month's work.

Floegel, senior painter, has been traveling. Bradford, second year painter, is continuing his work on his third year composition, a Descent from the Cross. Finley, first year painter, has been occupied with the Italian language, sight-seeing, fresco painting and life drawing.

About two weeks ago the senior painter of last year, Frank Schwarz, came down to Rome from Anticoli with his triptych of an Adoration in tempera. The composition has twenty-seven figures; character studies of the peasants of this famous center of Roman models, naturally abound in the work, but their application in this instance only serves the more to carry the painter's expression of a very quiet and dignified spirit of religious devotion. Of the success of this work, a first essay in tempera painting, we very freely admit having an exalted opinion. The few people who have seen the panels, both lay and technical-minded, especially the latter, have been compelled to linger before them because of the apparent mastery of drawing and pigment as well as the arrangement of color scheme and composition. Schwarz sails for New York January 8th.

Gustav Holst, the English composer, is visiting the Music Department at the Chiaravaglio for about three weeks. Mr. Holst, who has recently been awarded the Howland Prize of Yale University, is the composer of "The Planets," the "Hymn of Jesus," and last year's success at Convent Garden, "The Perfect Fool." He has just been commissioned to write a Choral Symphony for the forthcoming Leeds Festival, and is also engaged on a new opera for Convent Garden, "The Boar's Head."



S. BRECK PARKMAN TROWBRIDGE

S. BRECK PARKMAN TROWBRIDGE died of pneumonia after a very brief illness on January 29th, at his home in New York City. Mr. Trowbridge was born in New York, May 20, 1862. He is a graduate of Trinity, Columbia University School of Architecture, School of Classical Studies at Athens, Greece, and the Ecole des Beaux Arts, Paris. After Mr. Trowbridge's graduation in 1886, he was sent out by the Archaeological Institute to superintend the erection of the American School of Classical Studies in Athens. Upon his return to New York he was for four years in the office of George B. Post. Mr. Trowbridge was a member of Troop A, also served as first lieutenant, 12th Inf., N. G. N. Y.

Mr. Trowbridge was appointed by Pres. Roosevelt, Chairman of the National Council of Fine Arts; also he was an incorporator, vice-president and trustee of the American Academy in Rome; Fellow of the A. I. A.; Member of the Nat'l Institute of Arts and Letters, Nat'l Academy of Design, Architectural League of New York; Society of Beaux Arts Architects and many other organizations both in this country and abroad.

Mr. Trowbridge has been associated with Mr. Livingston, as Trowbridge & Livingston, architects, for thirty years and as a member of that firm has erected, among other notable buildings, the Bankers Trust Company Building, the Addition to the New York Stock Exchange and the banking house of Messrs. J. P. Morgan & Company, all on the corners of Wall, Broad and Nassau Streets, now known as the Financial Center, the Chemical National Bank, the Empire City Savings Bank, the St. Regis Hotel, the mercantile building of Messrs. B. Altman & Company, 34th St. and Fifth Ave., and the Mellon National Bank in Pittsburgh, the Palace Hotel in San Francisco, and the Bank of America now under construction on Wall, William and Pine Streets; also has completed plans for the thirty-three story office building to be erected for the Equitable Trust Company on the site of the present Mills Building on Broad and Exchange Place; also designs for the Mitsui Bank of Tokio, the construction of which will shortly be begun.

We quote from an appreciation by Pres. D. Everett Waid: "Due praise will be given to Trowbridge for his ability, his public spirit and his generosity. But one phrase comprehends all of these—he was an architect and a gentleman."

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ARNOLD W. BRUNNER

ARNOLD W. BRUNNER died of pneumonia at his home, 1 Lexington Avenue, New York, on February 14th. Mr. Brunner was born in New York, Sept. 25, 1857, and was educated at the public schools here and in Manchester, England. From 1877 to 1879 he studied at the Massachusetts Institute of Technology and for many years has practiced architecture in New York City.

The large majority of Mr. Brunner's works were of a public character, or of semi-public character, institutions, colleges and hospitals. Among Mr. Brunner's important works are the Stadium of the College of the City of New York, the School of Mines at Columbia University, Mt. Sinai Hospital, both the original group and more recent buildings the Jewish Maternity Hospital at 108th Street and Fifth Avenue, New York; the new group for the Jewish Hospital in Brooklyn; the proposed new Union Temple, designed to seat two thousand people with a community house containing complete equipment; the new group for Denison University at Granville, Ohio. The Chapel building of this group is completed and two of the dormitory buildings are now in process of construction. Mr. Brunner was also appointed architect for the new building to be erected adjoining the Jewish Theological Seminary at 123rd Street near Broadway, New York. Mr. Brunner was an enthusiastic designer and an expert in city planning. His practice was general though he is perhaps best known as the architect of well known public institutions.

COMPETITION FOR SMALL FIRE-RESISTIVE HOUSES

THREE thousand two hundred (\$3,200) dollars will be awarded in prizes by the United States Gypsum Co., for designs for two small houses. The competition is open to all architects, draftsmen and architectural students and is divided into two classes: Class A—five room bungalows: Class B—six room, two story dwellings. The competition has been instituted to introduce a new form of fire-resisting, permanent and economical construction through the use of Structolite Concrete construction and to make available a large variety of architecturally good small house designs in fire-safe construction to meet requirements in all sections of the country. If an announcement of this competition and a booklet giving Structolite Concrete Details and data have not been received, a request to United States Gypsum Co., 205 West Monroe St., Chicago, Ill., will bring them.

NEW YORK ARCHITECTURAL CLUB

GETTING the club properly launched on a good practical basis is quite a long tedious job. It is being handled by a representative group of eleven men who are known as the Committee of Eleven with Mr. George A. Flanagan, of Donn Barber's office, as chairman. To this body is entrusted the steering of a safe and sane course toward the goal of our ambition—A Club House—Our aim is to bring together the thousands of men in the architectural profession and its allied industries in the bonds of Fellowship and to foster various activities such as social, athletic and educational features in a rational manner.

A prospectus is now being prepared which should be ready for distribution early in March. It will set forth our object and plan of financing in a clear, concise manner and pave the way for a whirlwind campaign to raise funds for the club house.

Architectural Bowling League Division

The five man tournament for the season of 1924-25, ended Friday evening, February 6th, but as the Averages Committee has not yet submitted its report we can only announce at this time that the team from the office of Cass Gilbert was the winner of the trophy. A glance at the scores also shows that each man on the team has bowled over 200 during the tournament.

A complete report on averages and high scores, together with a list of the trophies and medals to be presented at the annual dinner in April will appear in that month's issue of PENCIL POINTS.

Owing to the increase in the number of teams participating as compared to last year and the scarcity of suitable alleys it has been decided to omit the two man tournament this year. The three man tournament, however, started off Monday evening, February 9th as scheduled and is now in full swing.

N. T. VALENTINE, Secretary.
Hotel Shelton, New York City.

PERSONALS

LESLIE A. LIBBY, ARCHITECT AND CONSTRUCTION ENGINEER, has removed his offices to 502-3 Press Building, 22 Monument Square, Portland, Maine.

FRANZ C. WARNER, ARCHITECT, has removed his offices to 506-10 Bulkley Bldg., Cleveland, Ohio.

JESSE LOUIS BOWLING, Architectural Engineer, has removed his offices to Suite 276 Arcade Building, St. Louis, Mo.

R. H. SHREVE AND WILLIAM F. LAMB have removed their offices to 331 Madison Avenue, New York, and will continue to practice under the firm name of Shreve and Lamb, Architects.

JAMES HOLT, ARCHITECT, has opened offices at 132-134 Market Street, Paterson, N. J.

SOREY & VAHLBERG, ARCHITECTS, have removed their offices to Braniff Building, Third and Robinson, Oklahoma City, Okla.

HAROLD MACKLIN AND WALTER FAUGHT have formed a partnership for the practice of architecture under the firm name of Macklin & Faught with offices at 145 Brevard Court, Charlotte, N. C.

ROYAL BARRY WILLS has opened an office for the practice of architecture at 8 Beacon St., Boston, Mass.



The Leoni W. Robinson Memorial Medal Awarded by the Architectural Club of New Haven for Excellence in Architecture.

PENCIL POINTS



HAROLD HEATH DAVIS

HAROLD HEATH DAVIS who was awarded first prize in the Small Brick House Competition recently conducted by The Architectural Club of New Haven, Inc., for prizes amounting to \$600.00 provided by The Connecticut Brick Manufacturers Association is a native of Middletown, Conn.

Mr. Davis obtained his elementary education and was prepared for college in the public schools of his home city. In 1916 he entered Syracuse University and was graduated with the class of 1920, Department of Architecture.

Soon after his graduation Mr. Davis entered the office of Charles Scranton Palmer, architect, New Haven, Conn., where he has had a broad experience on both public buildings and in domestic practice and still continues these associations.

Mr. Davis has been one of the directors of The Architectural Club of New Haven, Inc., for the past four years and at present is its treasurer. He is also a member of the Connecticut Chapter, American Institute of Architects.

ARCHITECTURAL CLUB OF NEW HAVEN

CONNECTICUT architects contributed 212 exhibits to the sixth annual exhibition of The Architectural Club of New Haven, Inc., which was held in the Trumbull Gallery, School of Fine Arts, Yale University, from April 14th to March 1st.

A notable feature of this exhibition was the section devoted to a showing of the work of Yale graduates who are practicing architecture. Among others who sent examples of their work were such well known architects as: Allen & Collens, Boston; Grosvenor Atterbury, New York; Edwin H. Clark, Chicago; Walter B. Chambers, New York; Nathan Harris, Newark; Edward C. Dean, New York; William E. Parsons, Chicago; Delano & Aldrich, New York; Howard Shaw, Chicago; Henry Killam Murphy, New York; Philip Goodwin, Louis R. Metcalfe, Charles N. Lowrie, landscape architect, Woolsey & Chapman, Harvey Stevenson, C. Frederick Mosle, Sheldon K. Viele, all of New York, and Bennett, Parsons & Frost, Chicago. The Yale section contained 122 exhibits many of which will be sent to the League exhibition in April.

Among the Connecticut architects who were represented in the exhibition were: W. F. Brooks, Hartford; Walter T. Arnold, Meriden; Walter P. Crabtree, New Britain; Leonard Asheim, Bridgeport; Brown & Von Beren, New Haven; Theodate Pope, Hill Stead, Farmington; Norton & Townsend, New Haven; Joseph W. Northrop, Bridgeport; Charles Scranton Palmer, New Haven; Edward B. Caldwell, Bridgeport.

R. W. Foote, New Haven; Whiton & McMahon, Hartford; Orr & del Grella, New Haven; Charles Wellington

Walker, Bridgeport; Jacob Weinstein, New Haven; Harold Hayden, Bristol; Philip Sellers, New Haven; Lorenzo Hamilton, Meriden; Gray & Lawrence, New Haven; William T. Troy, Bridgeport; Alfred W. Boylen, New Haven; Richard Williams, Hamden; Lester J. A. Julianelle, New Haven; Samuel Lea Snodgrass, West Haven; Shiner & Appel, New Haven; Frederick A. Davis, Jr., landscape architect, New Haven.

In the department of allied arts was shown examples of the work of Channing Cabot, artist, Michele Martino, sculptor, Albert R. Borho, decorator, Mrs. Norman L. Torrey, worker in batik, all of New Haven, and Louis A. Gudebrod, sculptor, Meriden.

Because of limitations of space but a few industrial exhibits were shown. These were contributed by The American Brass Co., Waterbury; The Decorative Stone Company, and the Economy Concrete Company, both of New Haven.

A section of the exhibition was devoted to showing the designs made for the small brick house competition which was conducted in connection with this show for prizes amounting to \$600.00 given by The Connecticut Brick Manufacturers Association.

R. W. Foote, architect, New Haven, served as professional adviser for this competition, and George H. del Grella, architect, New Haven, Charles Wellington Walker, architect, Bridgeport, and W. F. Brooks, architect, Hartford, were the jury of award. Judgment of the designs was made February 5, as follows: first prize, \$300.00 to Harold Heath Davis; second prize, \$200.00, H. Story Granger, both of New Haven; third prize, \$100.00 to William T. Troy, Bridgeport.

In its report the jury stated that the designs were extraordinarily good and because of this the three honorable mentions were made: first mention, to David N. Plumb; second mention, Robert L. Waldorff, both of New Haven; third mention, Ernest A. Sterling, New Britain.

The 1925 Yale Scholarship which provides two years tuition in the architectural department, Yale School of the Fine Arts, to a Connecticut architectural draftsman of two years office practice was awarded to Walter Cochran, New Haven.

The Architectural Club of New Haven has established a medal of honor in memory of the late Leoni W. Robinson who was generally conceded to have been dean of the profession in Connecticut, for several years prior to his passing, and who was also the club's first president. This medal will be awarded to a Connecticut architect for excellence in architecture for the first time this year, judgment having been made from work shown in this exhibition. Announcement of the award will be made at a dinner held February 25, too late to be reported here.

The medal, made by The Gorham Company, has for its obverse the reduction of a bas-relief portrait made by Louis A. Gudebrod as a memorial for the club. This portrait, in bronze, was first shown in this exhibition.

While the past exhibitions of The Architectural Club of New Haven have been largely local in character the advent of Yale men in architecture gave this year's show a national quality. It is said to be the first time that the work of the alumni of a major American university has been gathered for exhibition and it has been freely predicted that this precedent will be followed by the other large universities. The exhibition was so planned as to be in progress Alumni Day, February 22, and it proved to be an element of unusual interest to the hundreds of graduates who made their annual pilgrimage to their Alma Mater.

The fact that these Yale architects had been invited to participate in this exhibition evidently had an excellent effect on the exhibitors from Connecticut, for never before in the history of the club's exhibitions has the work submitted been so uniformly good or so well presented. Architects and critics who viewed the exhibition pronounced it equal to the big metropolitan shows in all but extent of numbers.

Beside the Yale men there were a few exhibitors from out of the State and they included Clarence Fowler, landscape architect, New York, and Charles J. Connick, designer and worker in stained and leaded glass, Boston.

Attendance has naturally increased each year from the first modest attempt made by the club six years ago. This year the attendance was very much larger than ever before, large numbers of visitors having come from the several cities of the State.

PENCIL POINTS



BRUCE BROWN

BRUCE BROWN, recently awarded an architectural scholarship at the University of Toronto, was born in Toronto and received his early education at the University of Toronto Schools. He graduated in 1917 and enlisted and served with the Canadian Expeditionary Forces in Siberia. Returning in 1919 he entered the Department of Architecture in the School of Practical Science at the University of Toronto. After four years admirable work he graduated with honors in 1923. He was awarded the Travelling Scholarship by the Ontario Government and the Silver Medal by the Ontario Association of Architects. He traveled for a year in England, Italy and France and finished by spending three months studying at the Fontainebleau School in France.

BOSTON ARCHITECTURAL CLUB

THE Boston Society of Architects (local chapter of the Institute) and the Boston Architectural Club gave a joint housewarming party on February 3rd. The Society now occupies headquarters in the building which has long been owned by the Club, and the occasion of the party mentioned was the first general use of the building by the two organizations since the completion of alterations undertaken by them jointly. The alterations, although chiefly utilitarian have greatly enlarged the possibilities of the building.

At the housewarming a dinner was given to all members most of whom wore medieval costume. After dinner some members of the Society lighted the Seven Lamps of Architecture after the interpretations of Mr. Ruskin and there were several short speeches by former officers. Mr. Louis C. Newhall, treasurer, in welcoming the Society, represented the Club. Mr. Charles D. Maginnis took charge as president of the Society, and the ceremony of lighting the Seven Lamps of Architecture, conducted by Mr. C. Howard Walker, was carried out by the following architects: James Ford Clapp, William R. Greeley, J. Lovell Little, Robert

P. Bellows, Charles G. Loring, William G. Perry and William D. Austin.

On the 24th of February the Club gave its annual costume ball which was this year entitled "Bal Russe."

"SELLING ARCHITECTURE"

THIS is a dreary, foggy February day, as I sit at my desk thinking of the recent letters which you published under "Selling Architecture," yet I am inclined to feel optimistic,—the world (Architectural) still appears rosy and I feel a sense of gratitude that as yet architecture has not taken a place beside "Wrigleys," "Djerks" and "Non-Skid Tires" on road-side billboards.

Your correspondents exhort us to take courses in salesmanship, to sell our wares on the street corner and in the daily newspaper, to become contractors and "what-nots," everything but what we are because we have been all wrong from the start. Can it be possible that we have labored all these years upholding our professional ethics and proudly proclaiming the noble art of architecture now to be told we are wrong in premise and in practice and must start over; have we been barking up the wrong tree and now must ungracefully climb down to seek refuge from the dogs of commercialism? O tempora! O mores!

It is rare indeed when construction of magnitude is carried on without architects' services and the fact that millions of dollars are expended each year in building construction under the direction of architects proves, not a lack of confidence on the part of the public but implicit faith in our business ability and a realization of the necessity for our services. When skepticism does exist, it seems to me, it is due to lack of confidence in an individual and not in the profession at large.

It is true that a small percentage of construction is carried on without architectural services but it is relatively small. There will always be the "penny wise and pound foolish," those anxious to get something for nothing or at a reduced price without regard for quality.

Isn't "advertising for architects" in the broad sense of advertising a lot of "poppy-cock"? Haven't we just grown out of the neolithic period of architects' pamphlets and the specification folder with advertisements on the back? We have seen the rise and fall (I understand they are diminishing in number) of construction firms who advertise architectural services, and we still have architects who advertise, as a perusal of our daily newspapers will show. Have these advertisers raised the standard of architecture or increased public esteem regarding architects? Are they getting all of the business and erecting all of the buildings or are they by their methods lowering the standing of the profession rather than inculcating confidence and esteem in the public for architect's services?

Advertising and salesmanship methods will not sell architecture. Completed work and satisfied clients will and not printed foibles and campaigns of salesmanship. Architecture will sell just as automobiles, radio sets and vacuum cleaners sell, when there is a public demand for it. Let us advertise—YES, but through educational work,—for a greater appreciation for all things good and beautiful, for the good of all and the title will return tenfold.

And who can doubt but that this educational work is going on when we see the tremendous improvement in public and private buildings and especially in small residential work; on the stage; in the movies; in all art and everyday activities. Are our present methods wrong?

H. STORY GRANGER,
Secretary and Treasurer,
Connecticut Chapter, A.I.A.

THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

THE New York Chapter of The American Society of Landscape Architects will hold their Second Annual Exhibit of Garden Photographs from March 17th through April 18th in the Arden Gallery, 599 Fifth Avenue, New York. Notable works of sculpture suitable for the garden and specially designed furniture, executed by skilled artisans, will also be displayed.

CLARENCE FOWLER,
Secretary, New York Chapter,
15 East 40th Street, New York.

PENCIL POINTS



Announcement of the Xmas Follies of the San Francisco Architectural Club late in reaching us but so attractive we had to use it.

SAN FRANCISCO ARCHITECTURAL CLUB

"Just a few words from the San Francisco Architectural Club to inform you that we are still on the map and going strong. We are highly appreciative of the great work that Pencil Points is doing for the individual draftsmen and all the architectural clubs throughout the country and we regret that we have not kept you better informed as to the progress and activities of our club. We feel that other clubs are interested in our welfare even as much as we are interested in theirs."

"Our club has just passed through a very active and prosperous year and is keenly looking forward to an even more progressive and interesting year. Our membership is growing constantly—our atelier is the best in the West as shown by the medals, first mention placed, first mention and other awards received in the Beaux Arts work,—and our entertainment committee is upholding the reputation of the club for staging clever and varied programs that keep the social life of the club very much alive."

"I am enclosing a programme of our annual Christmas jinks together with a review and photograph of the same. It may not be suitable for publication but you will see that it gives some idea what a crowd of architectural draftsmen can do in the way of amateur theatricals when they are pleasure bent and have club spirit behind them."

"The club now has a publication committee and we are going to see to it that the whole world knows there is a San Francisco Architectural Club and that it is *some* club. You will hear from us again."

"With the very best wishes for the continued and ever increasing success of PENCIL POINTS, the draftsmen's best friend, we remain

Sincerely,

The San Francisco Architectural Club,
by LAWRENCE H. KEYSER.

SAINT LOUIS ARCHITECTURAL CLUB

THE St. Louis Architectural Club conducted a spelling match at the Club's headquarters, 514 Culver Way, on February 5th, and we have received the following account of the meeting from John A. Bryan, President of the Club:

"The captains of the teams, Mr. Ernest C. Klipstein, of the firm of Klipstein & Rathmann, and Mr. Louis La Beaume, of the firm of La Beaume & Klein, divided evenly the members present and sat them down in rows of chairs facing each other in the center of the Assembly Hall of the Club. Whenever the umpire called out "next," a chair with its occupant slid back towards the wall to the tune of "Slide, Kelly, Slide," the favorite form of razzing from the others in the game.

"The words given out for spelling were, for the most part, architectural terms, and of these "anthemion" brought about the most casualties. Strange to say, the words which proved to be too much for the Captains were of Oriental flavor, and not strictly architectural—"Mohammedan" being Mr. Klipstein's Waterloo, while "caravansary" was a knock-out for Mr. La Beaume.

"The contestants finally simmered down to Alfred Norrish, of the Klipstein Klan, and Frederick Hammond of the La Beaume Lancers. Norrish fumbled "entasis" which Hammond spelled correctly and carried off the prize. Norrish is a graduate of the School of Architecture in Washington University, and since his return from Europe recently has formed a partnership with Theo. Steinmeyer and Walter Sehr; while Hammond, also a graduate of Washington University, has, since his return from Europe two years ago, been in the office of Jamieson & Spear.

"Strange to relate, this contest was the first of the Club's activities in recent years that has attracted the attention of the daily newspapers. A press row was provided for the reporters from the *Globe-Democrat*, *Post-Dispatch* and the *Star*, and those papers all devoted considerable space to accounts of the contest the following day.

"Contributing much to the fun of the occasion were the remarks made to the umpire from the side lines. When he announced to Mr. Klipstein that his first word would be a choice of two words which though of the same pronunciation and of equal interest to architects were nevertheless spelled differently and carried different meaning,—one being "arris" meaning an edge formed by the meeting of two concave surfaces, and the other being "heiress" meaning a woman who had inherited wealth—Mr. Klipstein said that he would "take the woman with the money." When the word "lackadaisical" was given, the member accosted asked for its definition; and Carl Trebus ventured the remark that it meant "the attitude of a draftsman." To the architects present this remark seemed pertinent, while to the draftsmen it seemed unkind; but Mr. Trebus, through his long association with the Otis Elevator Company, is one of those Associate Members who can afford to be independent in their comments.

"It is confidently hoped that specifications and plans emanating (another word that bowled them over) from the St. Louis offices in the future will carry fewer misspelled words than heretofore, and show a deeper appreciation of the life work of Noah Webster."

A FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(Other items on pages 110 and 118)

Wanted: Architectural draftsmen with at least three years' experience, whose natural ability tends toward design, wanted immediately for work in Hazleton, Pa., 4½ hours ride from New York City. Write giving full particulars to Peter B. Sheridan, Marble Bank Building, Hazleton, Pa.

Wanted: A young architect of good address, to interview Architects in order to interest them in a useful product for building purposes. Asbestos, Shingle, Slate & Sheathing Company, Ambler, Penna.

PENCIL POINTS

ATELIER HIRONS COAST-TO-COAST TRAVELLING EXHIBITION

THE "Traveling Exhibition," that absurdly large name for a jumble of studies-en-atelier and three Paris Prize "projets rendu," is off to a flying start. After numberless hitches and delays the regular itinerary has commenced and will be continued as follows, subject to one or two possible deflections and corrections.

—Feb 11	Princeton University, (N. J.)
Feb. 11-21	Syracuse University, (N. Y.)
Feb. 21-28	Atelier Rectagon, (Buffalo, N. Y.)
March 1-11	Penn State College, (Penn.)
March 11-18	Geo. Washington University, (Washington, D. C.)
March 18-25	Howard University, (Washington, D. C.)
March 25-April 4	Alabama Polytechnic Institute, (Auburn, Ala.)
April 4-14	No. Carolina State U. (Raleigh, N. C.)
April 14-24	Ohio State U. (Columbus, O.)
April 24-May 3	U. of Illinois, (Urbana, Ill.)
May 3-13	U. of Kansas, (Lawrence, Kansas.)
May 13-23	Atelier Denver, (Denver, Colo.)
May 23-June 2	Montana State College, (Bozeman, Mont.)
June 2-12	State College, Washington (Pullman, Wash.)
June 12-22	U. of Washington, (Seattle, Wash.)
June 22—	Allied Architectural Club of Los Angeles, (Calif.)

The collection which weighs only about 40 lbs., boxed consists of the Paris Prize, "projets rendu," of Rudolph de Ghetto and Richard Banks Thomas in 1923, and that of Andrew F. Euston in 1924, besides 200 studies made and kept in chronological order by R. B. Thomas, showing the development from the esquisse to the final rubbing studies, and a number of the studies for the projets de de Ghetto and Euston. The exhibition is made possible through the efforts of the Atelier Hirons and the generous co-operation of Messrs. de Ghetto, Thomas and Euston in loaning their drawings. Each school is under obligation to forward the collection of the proper date prepaid to the next stopping point, but that is the only expense involved. For any information, communications may be addressed to Richard Banks Thomas, 516 Fifth Avenue, New York City.

THE ARCHITECTURAL SKETCH CLUB OF CHICAGO (Formerly The Chicago Architectural Club)

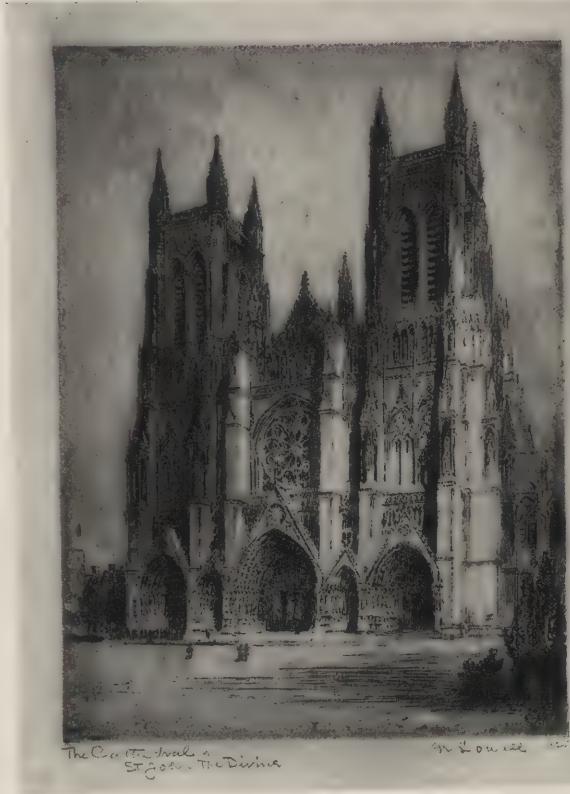
THE life-class is now in full swing and, under the guidance of Claude Woodruff the pencil-pushers are rapidly increasing their knowledge of human anatomy. Mr. Woodruff is engaged during the day as an instructor at the Chicago Academy of Fine Arts. The class meets every Tuesday evening from seven to ten.

The structural class, which is given annually, is now under way with an enrollment of thirty. This class is for the purpose of reviewing the Engineering Studies in preparation for the State Board Examinations for Architects.

Mr. Wm. Hooper, who is a practicing Architect and Engineer, instructs and covers a very practical and thorough course in Strength of Materials, Steel and Wood Construction, Graphic Statics, Reinforced Concrete, and includes some Specification and Slide Rule work.

The class meets twice weekly from 6 to 7 P. M. in the club rooms. The entire course covers twelve weeks and is completed just prior to the examinations.

This instruction is not limited to members of the Club.



Etching by N. Lowell.
The Cathedral of St. John the Divine.

THE PRINCETON ARCHITECTURAL PRIZES

AFUND for annual prizes and other special purposes has been established in the School of Architecture of Princeton University, by friends of the School. Mr. E. James Gambaro and Mr. Charles H. Dornbush were the prize holders for the year 1924-1925.

Two competitive prizes, of \$800 each, are announced for the year 1925-1926, to be known as The Princeton Architectural Prizes.

The purpose of these prizes is to place at the disposal of experienced draftsmen of unusual ability, who desire to complete their professional training by contact with the academic side of architecture, the advantages to be found in the School of Architecture, the Department of Art and Archaeology, and the Graduate School of Princeton University.

The winners of The Princeton Architectural Prizes, although not enrolled as undergraduate or graduate students, will be permitted to reside in the Graduate College during the year of their tenure. Rooms and board may be obtained from \$480 up, for the academic year. The Prize-men will be exempt from charge for tuition.

For application blanks, and regulations governing the Competition and award address The Secretary, The School of Architecture, Princeton University, Princeton, N. J.

THE MILWAUKEE ARCHITECTURAL CLUB.

OUR New Year's Eve dinner and dance was a success and was attended by about 42 couples.

A bowling party was held Friday evening, Jan. 30, 1925. These bowling parties will probably be held the first and third Tuesday of the month hereafter.

Sunday morning sketch classes will be formed, in addition to the Saturday afternoon sketch classes which are now being held.

Local design problems, similar to those issued by the Beaux-Arts Institute are issued every two weeks and prizes will be donated by local contractors and material men.

PETER H. PETERSEN, Secretary.

PENCIL POINTS

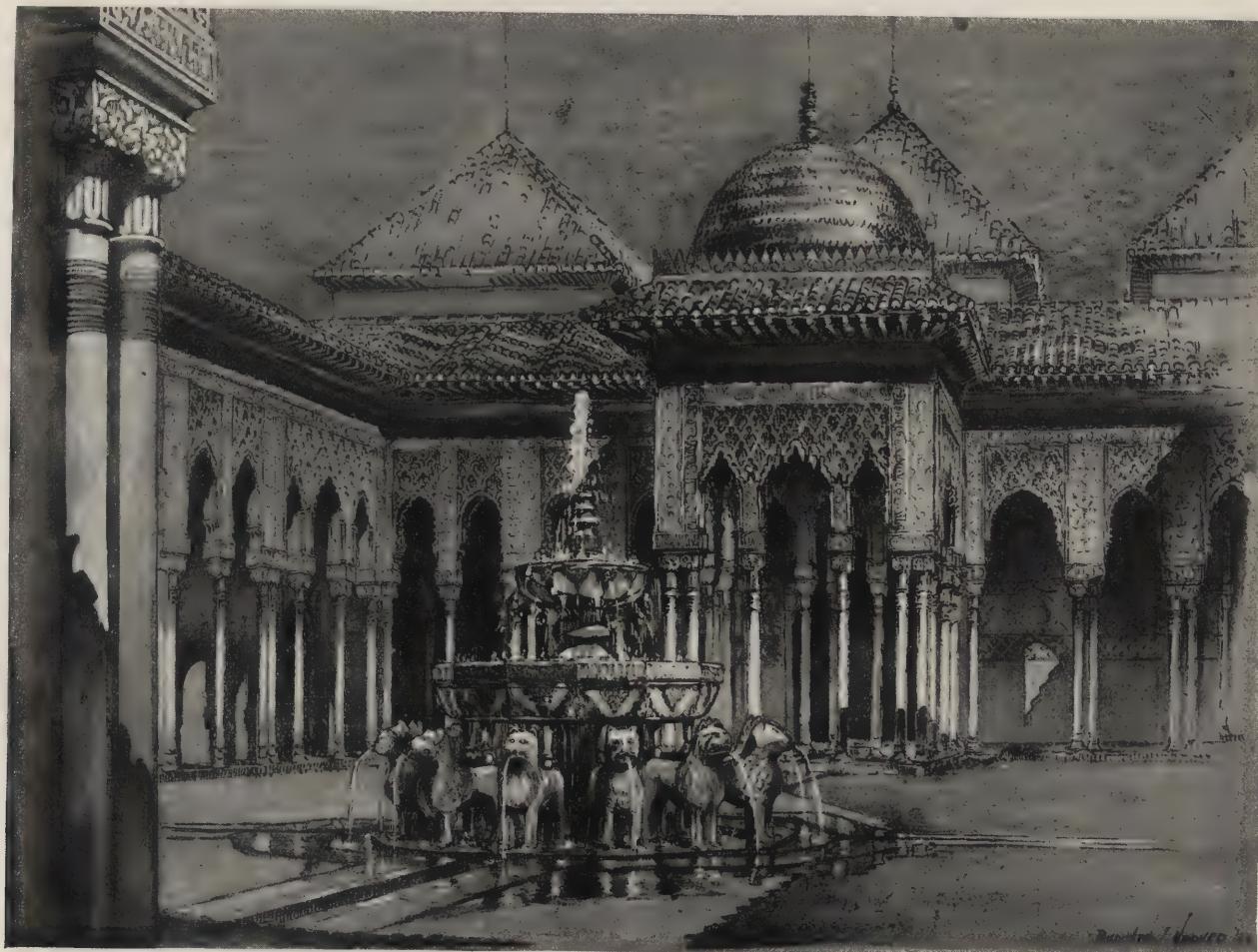
UNIVERSITY OF LOUISVILLE

ALTHOUGH the University Archi-Arts Society of the University of Louisville has been organized for nearly six months, it was on February the eighth that it took its first step towards a permanent organization. This was in the shape of a meeting with architects and draftsmen of the city for the purpose of showing the work and aim of the club. The drafting room was decorated for the occasion with an exhibit of drawings of the class. The meeting began with a light supper that was not only to show our hospitality to our visitors, but also to give them a better chance to get acquainted with each other. The meal was made even more pleasant by music from the radio. The supper was followed by several piano solos and by talks from the different architects that attended. Each speaker encouraged the club in its work and pledged his support to its undertakings in the future. Messrs. D. X. and J. C. Murphy announced that they would institute several prizes for the best averages at the end of the year in the different classes of work. After the meeting was over, the men gathered around the piano and ended the evening by singing some old familiar songs. When all the people had dispersed and the room was empty once more, there entered into the heart of every member the feeling that the evening was a success, and that the work must and will go on.

Respectfully submitted,
ROBERT W. HUNN, Jr., Sec.

THE ARCHITECTURAL EXPOSITION

EVERY draftsman as well as every architect who can possibly attend the big architectural show to be held in the Grand Central Palace, New York, April 20th to May 2nd inclusive, should be among those present. This paragraph is addressed particularly to men located outside of the Metropolitan District, for it is assumed that all local men will attend. In our pages for the past few months space has been devoted to the subject of "selling architecture." This exposition, to our mind, bids fair to eclipse all efforts heretofore made to bring the architectural profession and the interested general public together to their mutual advantage. Not only will the exposition itself be of great interest to us all, but in addition to the various exhibits from this and foreign countries which will be on view, the annual show of the Architectural League of New York will be held at the same time and place as well as the big convention of the American Institute of Architects. Never before has anything on the same scale been done in this or any other country. So why not make a special effort to participate in this event and to be an active part in the movement which is bound to exert a significant influence upon American Architecture.



The Court of the Lions, Gouache Drawing by R. Nedved.

PENCIL POINTS

LAYING OUT AN APPROXIMATE ELLIPSE

THE further information on the drawing of an ellipse supplied by Egerton Swartwout in response to an inquiry from a reader who wished a more detailed description of a method mentioned in one of Mr. Swartwout's articles in a recent issue of PENCIL POINTS is of so much interest that it is printed below together with the letter of inquiry.

Editor of PENCIL POINTS:—

IN the October issue of PENCIL POINTS there appeared an article by Egerton Swartwout on Working Drawings, the Contract Set, in which he used several drawings from the National Victory Memorial or George Washington Memorial. After carefully studying the drawings I am unable to work out the system used in the development of the ellipse shown. He gives the location of the centers used but I am unable to figure out how he found these centers at the start.

This is the most perfect ellipse I have ever seen drawn with a compass and would like to learn how to use this system of laying out the points. If you can supply me with this information I certainly will appreciate it.

Yours very truly,

(Signed.) JAMES S. DOUGLASS, JR.

William K. Hagan & Son,
Architects & Engineers,
First National Bank Building.

Editor of PENCIL POINTS:—

THE method of laying out the ellipse referred to by Mr. Douglass is described in an article published by David C. Coyle, C. E., in the American Architect and Architectural Review of April 12, 1922. Mr. Coyle made the computations and located the centers given in the drawing referred to by Mr. Douglass. Mr. Coyle says in his article that this method is applicable to an ellipse of usual proportions, namely the length not more than twice the width. I had occasion to lay out another ellipse for a large elliptical fountain in which Mr. Coyle was good enough again to lay out the dimensions in the same manner but as this ellipse was slightly narrower the result was not particularly good. In the case of the George Washington Memorial I have laid out the ellipse a number of times at different scales and it works to a hair, the difference between the curve so obtained and a true ellipse being absolutely negligible.

Yours very truly,

EGERTON SWARTWOUT.

Laying Out An Approximate Ellipse

By David C. Coyle.

AN ellipse of the usual proportions, i. e., with length not more than twice the width, may be imitated so closely with circular arcs that the eye cannot detect the difference. The advantage of the compound curve lies not only in greater ease of drafting, but in the simplification of all the computations relating to its dimensions. This latter factor may be an important one where a structure is built of elliptical form of steel or stone which will require detail shop drawings.

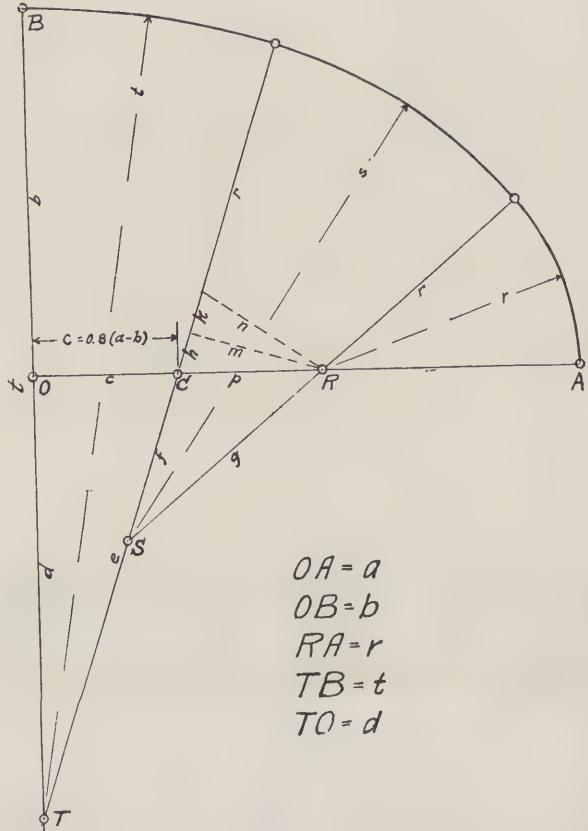
The usual rules for drawing such a curve give a resulting oval which is easily recognized as a false ellipse. This is due to the fact that the radii used are the maximum and minimum radii of curvature of the true ellipse. Their arcs touch the ellipse only at the ends of its minor and major axes and as the curve leaves this point of contact it becomes more and more widely separated from the true ellipse. The intermediate radius is obtained by guesswork.

The semi-major axis being a , the semi-minor axis being b , then the maximum radius of curvature is $\frac{a^2}{b}$

and the minimum radius is $\frac{b^2}{a}$. Instead of these values, the following may be used:

$$t = \frac{0.04 b^2 + a^2}{1.04 b} = \text{Maximum radius.}$$

$$r = \frac{0.04 a^2 + b^2}{1.04 a} = \text{Minimum radius.}$$



The resulting circle of radius r goes through the points $x=0.915a$, $y=\pm 0.41b$, as well as through the point of tangency $x=a$, $y=0$. Similarly the circle of radius t , goes through $x=0.41a$, $y=0.915b$, all of these being points on the true ellipse.

Theoretically it is now possible to compute an intermediate radius s , such that its arc will be tangent to the other two arcs and also will pass through one point on the ellipse. The computations however are more elaborate than the result warrants. One may obtain the same effect, so far as the eye can detect, by assuming the distance $c=0.8(a-b)$.

The foregoing computations need be only approximate; a variation of two or three per cent will not visibly affect the resulting curve. The position of the point S must be accurately located for it is fixed when the three points R , T and C are fixed.

For establishing the position of the point S the following method avoids the use of trigonometry:

$$d^2 + c^2 = e^2; m = \frac{dp}{e}; h = \frac{cp}{e}$$

$$k = t - e - r - h$$

$$g = \frac{n^2}{2k} = \frac{m^2 + k^2}{2k}; f = g - h - k.$$

These lengths f and g having been accurately computed, all the necessary co-ordinates are easily found by proportion. The figures may be checked by making a careful layout of the curve, when the circular arcs should exactly meet.

*With Gunvald Aus Co., Consulting Engineers, New York City.

* Reprinted through the courtesy of The American Architect.

PENCIL POINTS

DESIGN IN THE DRAFTING ROOM (Continued from page 81)

The entire composition reads a commercial building, steel skeleton structure, clothed and enhanced by suitable materials for design. All this was wonderfully aided by model study, widths and depths of piers determined, set back stories and steps in tower fixed and each detail mass grouped in proportion to the entire building.

Figure 4 shows a working drawing elevation in the state of preparation for the building of which the model was prepared. While this is the final step (not considering scale and full size drawings and models) of design in the drafting room it will be seen how difficult it would be to read relative surfaces, projections, etc., the draftsman knows, however, that the drawing is correct from previous study and knows that the contractor will use this drawing as an instrument to accomplish the finished work which has been foreseen and forethought.

Figure 5 shows an interior perspective of "The Playhouse" erected in Detroit, Mich. Perhaps this might be termed an explanatory drawing. It was prepared to enable the client to see the interior effect of the house. The light effect is obtained from the illuminated stage; the underside of the balcony is in deep shadow. It is very good to develop the ability to prepare sketch perspectives, so much can be told to those unaccustomed in reading line drawings.

Figure 6 shows a study sketch of a theatre to be erected in Detroit. It is interesting to note what can be done with an odd shaped plot. This is practically a free hand sketch and much is told. Another interesting point is the way of bringing the fire exits from the balconies inside the building lines, taking advantage of the curved walls of the auditorium.

Figure 7 shows a working design sketch study. Section indicating the upper lounge and rear foyer of main floor

as seen from the auditorium. Many dimensions have been determined, ceiling vaulted, decoration of arches, etc., etc. This is not a working drawing, but is the final study, before "going on cloth." The work for which this and many other interesting studies are being made is for the State Theatre now under construction in Detroit, Mich.

Figure 8 shows purely a talking sketch indicating or suggesting the interior treatment for the lounge in "The Playhouse." A draftsman should be ready to make such suggestions, it is very necessary and a part of the work. The little sketch illustrated counts well for what it is meant, light entering the windows on the right, strong contrast for indication of chair, the door spot placed at center right, etc.

To be able to make suggestions on talking sketches is invaluable and much labor and effort can be saved in explanation. In summing up, to maintain and further develop the high standard of architecture those who are engaged with design the drafting room must constantly draw and draw well.

(To be continued)

THE STUDENT AFFILIATION PLAN OF THE BROOKLYN CHAPTER

THE student affiliation plan of the Brooklyn Chapter of the American Institute of Architects is being put into effect and an unusually well made booklet on the subject has been prepared for distribution. The plan, as previously stated in these pages, offers to all the younger men in the profession in the territory the social, educational and professional advantages of affiliation with the Chapter. Information may be had by addressing Lester B. Pope, Chairman, Committee on Education of the Brooklyn Chapter of the A. I. A., Pratt Institute, Brooklyn, N. Y.



Cass Gilbert's Team of the Architectural Bowling League, Champions for the Season 1924-1925. Standing, left to right: Joseph Weiss, Cass Gilbert, Jr., Cass Gilbert, Joseph Mohn. Seated: Henry P. Zerfass, Fred Spickel, Henry G. Poll, Captain, Rex D. Read and Paul Zabriski.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY R.W.R.

A SKETCH wins the prize for the most meritorious contribution appearing in this department for February, and it goes to Mr. Meade A. Spencer, New York.

HERE is where our British cousins come into action and we are glad of it. The letter from Mr. Millman amuses us a lot and here it is:

Dear Sirs:

I have just received an epistle from you entitled—"Who'd a Thunk It?" I have endeavored to decipher this (believe an Englishman) and can only see one meaning—you wish me to renew my subscription! Dear Sirs, Before you start the National Debt collecting business in such a durned hurry, just wait for the mails. I sent my 3 dollars to you at the beginning of this month (January).

By the way, when you've cooled down after this I've something to tell you.

There's a lot too much of the banquet advertising in R.W.R.'s col. It's a drafting magazine, not a cook's magazine! and that's that.

Then there's another thing. Why in R.W.R.'s name put in a lot of bowling teams? I ask you.

Now I'm going to congratulate you on No. 1 of PENCIL POINTS for this year. I like your Master Draftsman Series—but what about a few of the old 'uns, Piranesi, eh? Can't you illustrate some if it—sure! come on—do!

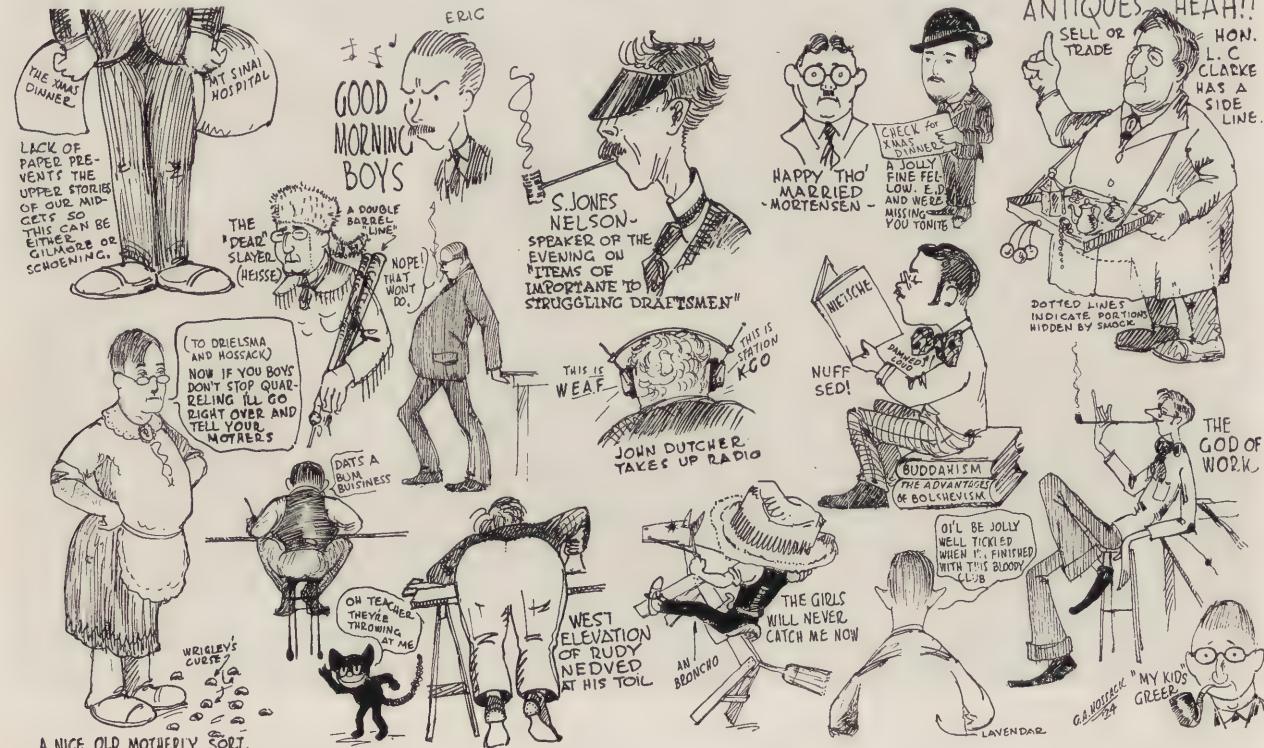
Let's have more drawings, loads of 'em, and articles on how to draw—and don't forget what I said about snuffing the banquet business.

Good-bye!

JOHN H. MILLMAN.

I hope you've found that 3 dollar cheque by now—s'elp me.

Of course it takes the mails longer to get from here to



London and back than is consumed by a round trip, let us say to Brooklyn or Yonkers, which accounts for the fact that Mr. Millman's check did not reach us until our communication to which he refers had been mailed. We simply cannot understand why anyone should hesitate an instant in renewing his subscription so we do not wait very long before sending a second invitation. It is true, as Mr. Millman says, that we have been publishing a lot of posters and news about banquets and similar doings quite without realizing the preponderance of such material. This is probably because an office party or a dance or something of the sort inspires someone to do a cartoon, and naturally many of these find their way to us. Has food been too extensively featured? What does the draftsman think about when he is not drafting, (and when he is)? Has anyone anything to say on the subject?

AND now we hear from architect and PENCIL POINTER Ernest Stevenson, Port Elizabeth, South Africa. Here is his letter.

"My very hearty congratulations for everything you do. You are alive and interesting as well as amusing and it is refreshing to be amused and instructed at the same time. Don't take any notice of the gentleman who objected to your fun pages—he doesn't know how much he'd miss them because they are there. Hope you will be able to read this. Best wishes."

It makes us blush a little, but we are getting used to that. Having learned many years ago to decipher our own chirography with fair success we have no trouble in reading the writing of anybody else.

Now we really want to hear more often from our subscribers who are located at a distance. All parts of the

Cartoons from "The Annual Browse," Get-Together of the Office of Schmidt, Garden & Martin, Chicago, Ill.

PENCIL POINTS

British Empire are represented and we would like to see sketches or any other interesting material they may care to submit to this department. And we don't hear very much from Canada. Draftsmen of America are greatly interested in what their brothers in the profession located in other parts of the world are doing.

The sketch published on Page 87 of our February issue was submitted by Mr. Merritt F. Farren. We regret the error in the spelling of his name.

The sketches presented this month certainly take the cake for variety in size and proportion. We have tried to make a well balanced layout of this material and it cannot be done. So we beg our readers to consider each sketch on its merits and don't be too hard on the editor who, to quote the late Henry Bacon, "has done the best he could with the material at hand."

R. B. Wills announces that he has opened an office for the practice of architecture at 8 Beacon Street, Boston, Mass. Thus does one of our faithful contributors stretch his wings and square away on the big job of life. Our best wishes go with him!!

Kenneth E. Legg, 1499 State St., Salem, Oregon, is anxious to secure copies of PENCIL POINTS for August and September, 1920. He will pay a good price for copies in good condition.

Fred J. Woodward, 1423 Harvard St., Washington, D. C., has copies of 1922 PENCIL POINTS complete which he will sell for \$3.00.

A. Wetter, 4042 No. Keystone Ave., Chicago, will sell PENCIL POINTS for 1924 complete.

Our free employment service is doing very well, thank you, having found suitable men for architects who needed them in all parts of the country and having located over a thousand draftsmen in positions. Here is an extract from a letter typical of many we have received.

"Also discontinue my advertisement as through same I have made a splendid connection in this city at a decided increase in salary. My ad in your publication was only one of a multitude of schemes which I used to make a connection and was the only one which brought anything worth while.

"For all of which I thank you."

We like this part of our work and hope that all architects desiring men as well as draftsmen seeking positions will advise us of their needs.

Renting Agent: "And of course the Laving-alcove is equipped with the new Super-Luxuria fixture."

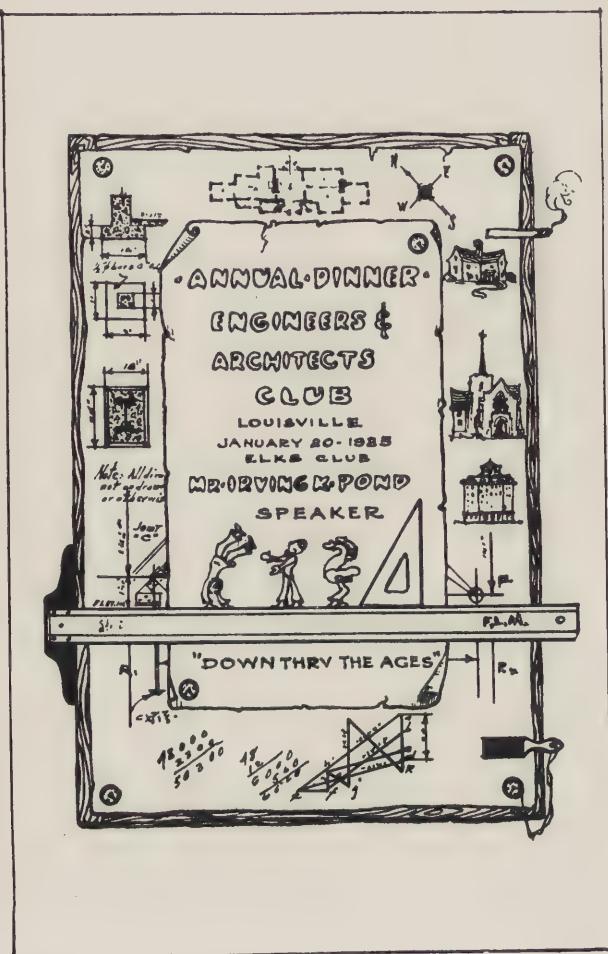
House Hunter: "And what is that?"

Renting Agent: "Telephone and radio combined with the bath tub, with built-in receptacle for tumbler and ash tray!"



The Competition Drawing, by R. B. Wills, Boston.

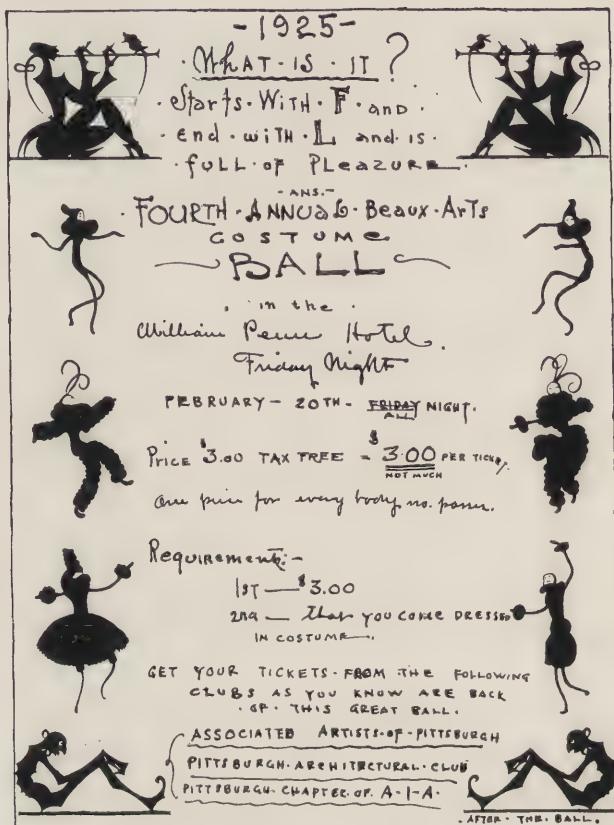
PENCIL POINTS



Program of Annual Dinner of the ENGINEERS AND ARCHITECTS CLUB of Louisville, at which Mr. I. K. Pond was speaker. The little figure on the T-square represents Mr. Pond's well known tumbling and gymnastic powers. The frontispiece was designed by Mr. Frederick L. Morgan.



By George D. Conner.



Poster announcing Beaux Art Ball held in Pittsburgh, February 20th.



By Wm. P. Spratling.

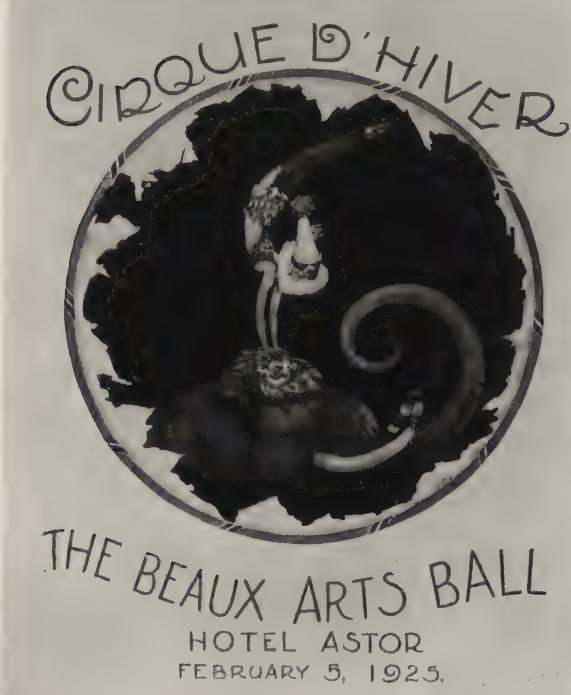
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Sketch by Wm. P. Spratling, made at Rouen.

Teachers Wanted: For the school year beginning September 8, 1925, the Department of Architecture of the University of Cincinnati is desirous of filling the following new positions:

1 Assistant Professor of Architecture, (Major work in Design); 1 Assistant Professor of Architecture, (Major work in History of Architecture); 1 Assistant Professor of Architecture, (Major work in History of Medieval and Modern Art); 1 instructor in Freehand Drawing. Address applications or inquiries for further information to the Dean of the College of Engineering and Commerce, University of Cincinnati, Cincinnati, Ohio.



Drawing by Willy Pogany for the Cover of the Program of the Beaux Arts Ball, held on February 5th in New York.



PENCIL POINTS



Rendering by Norman D. Alpaugh, Los Angeles.

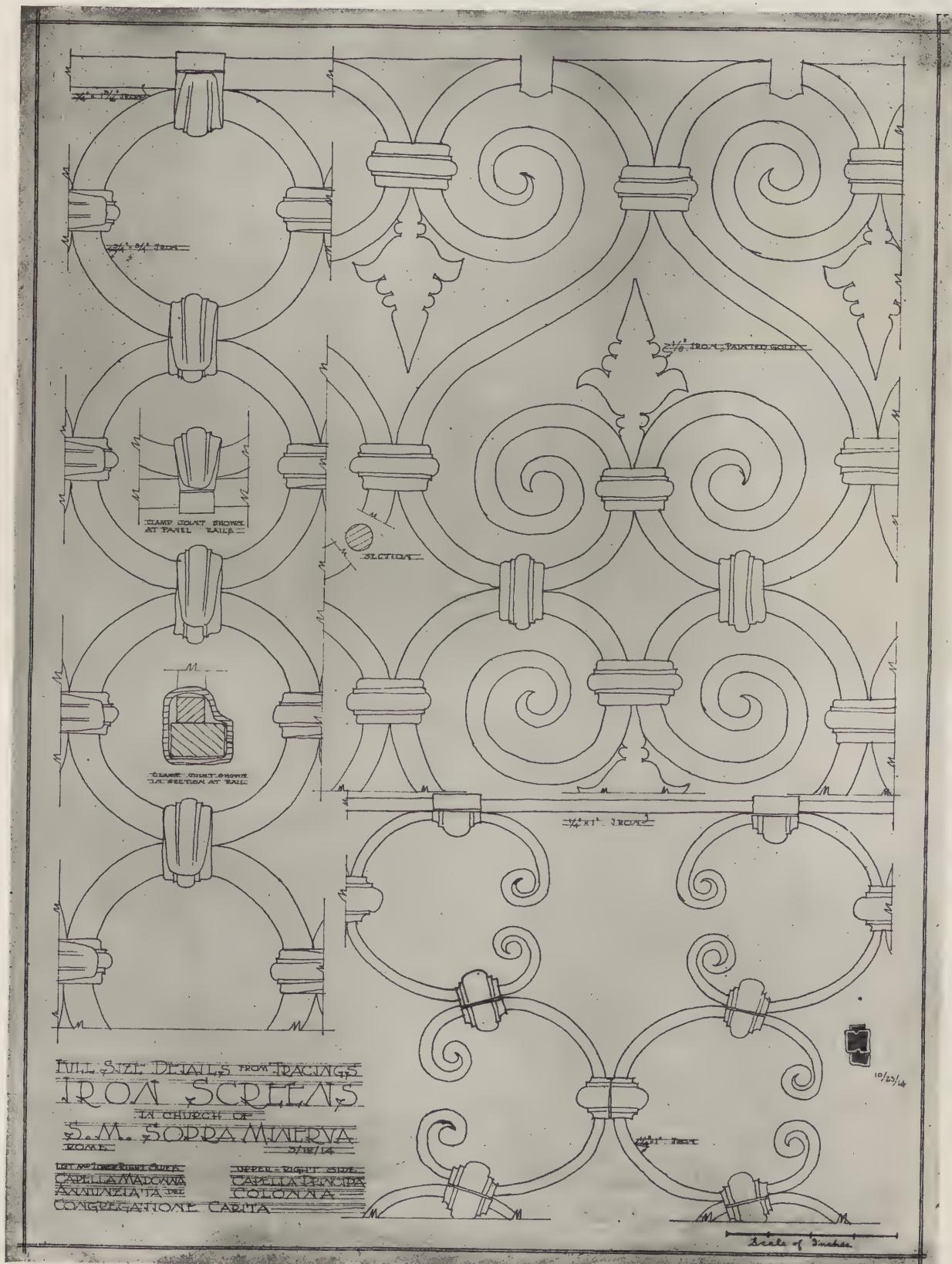


Rendering by Joseph Jogerst. Bank and Office Building for Detroit, Mich.

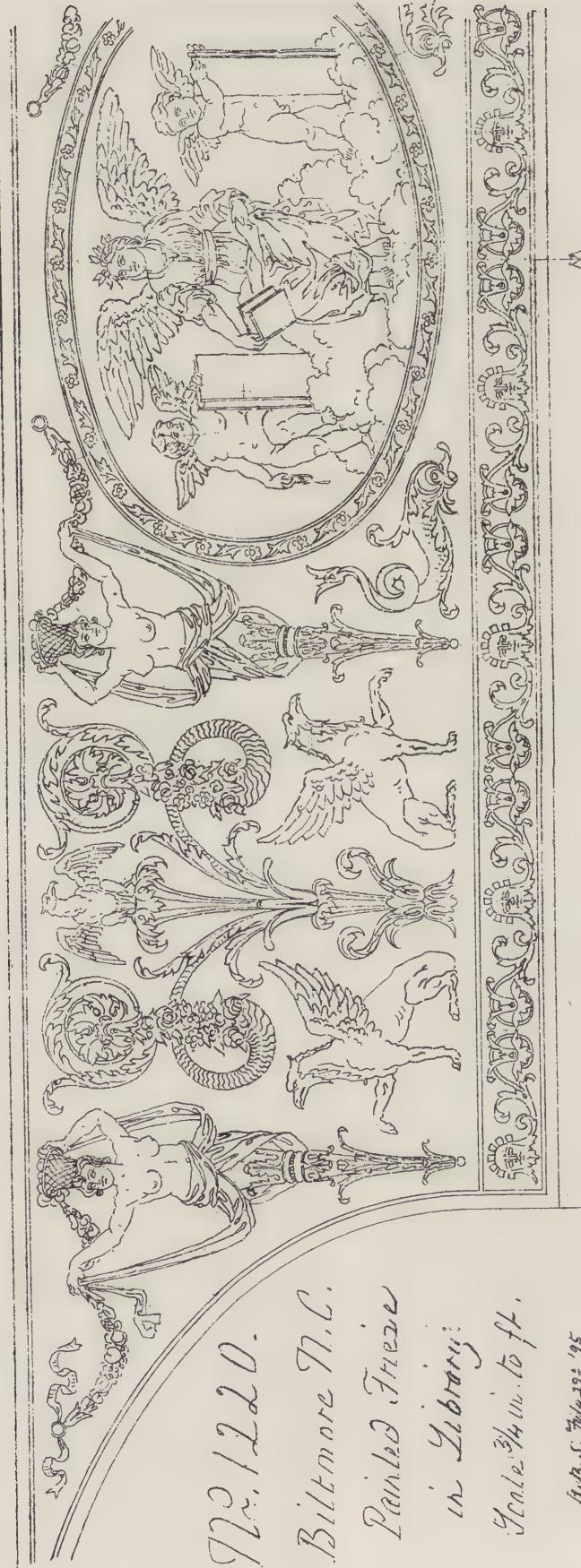


Pencil Sketch on brief paper by George D. Conner, Chicago. Half timbered houses at Lisieux.

PENCIL POINTS



Iron Screens in the Church of S. M. Sopra Minerva, Rome.
Measured and Drawn by Herbert Lippmann.



722.1220.

Biltmore N.C.
Painted Frieze
in Library:
Scale 3/4 in. to ft.

H.B.S. May 29: '95

Design for Painted Frieze in the Library of the Home of George W. Vanderbilt, at Biltmore, N. C. Hunt & Hunt, Architects.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. Beach

PART V.

THE MAKE-UP OF A SPECIFICATION

AN architect's general attitude toward the whole function of a specification is bound to be reflected in his production of such documents.

They can be treated either as a necessary evil to be disposed of as quickly as possible, or as an important but much neglected part of the office output; or they can be made to bear testimony to the care and attention to details of a well-directed organization.

In the progress of job after job through the workshop of any architect, it is inevitable that the specifications will be a repeated re-hash of those which have gone before. And, hovering in the back of the mind of every architect who has done much specification writing lies the hope, more or less well-defined, that, some day, enough of the body of the specification can be standardized and printed so that the adapting of the residue to each new building will not be the arduous task involved in preparing an entire specification for each one.

Whether or not this is feasible in any office is inter-dependent upon so many qualifying circumstances as to demand consideration from all angles and will be subject for a later chapter.

Choice of a form of compilation for one's specifications need be made dependent solely upon the size and character of work to be produced. We are confining our major dissertation to the specifications for a building costing something over a hundred thousand dollars. For such a structure as well as for those larger, we have pointed out the desirability of separating the subject-matter under various headings. These are tentatively listed in Part II.

It remains then to determine whether we will assign to each subject the least possible space, making for the utmost brevity, *en toto*, or whether we will have for our objective a comprehensive document from which nothing has been omitted which should have been introduced to make the thing complete.

There are arguments supporting either procedure.

Of course, a happy medium would be most desirable and certainly there is no good reason for deliberately making one's contract documents unnecessarily voluminous.

There are things to be said in favor of issuing skeleton drawings to bidders, leaving all detailing to the future. One reason given the writer by a firm of apartment house architects was "We are doing this work so cheap that we can't afford to spend very much for drawings and specifications. Our contractors know about what we expect anyway."

But is that architecture?

(It might not be amiss here to make mention of a certain phase in "Selling Architecture" which makes itself manifest in competing for services. This phase is a common one and well exemplified by the following experience. The writer was invited to appear before a church building committee and was employed at the A. I. A. rate, but signing of a contract was held up until the committee could check up his charge with that of others. The committee was told that it would have to spend twenty-five per cent more than the appropriation and the building could easily have been put up for that amount. But came another firm who took the work for half-price and with the assurance that the work could be done within the appropriation. It actually cost double the intended amount and solely because of careless planning and poorly written specifications. The church paid a thousand times what good architectural service would have cost and the committee was kept busy explaining how terribly their architects had misled them and how untrustworthy is the whole fraternity.)

Abbreviated specifications are as unsafe as abbreviated drawings. It is safer by far to make them too complete than to make too much effort to curtail.

Perhaps the most desirable form of specification is that wherein each major division is again sub-divided as to descriptions of materials and workmanship. This is at once applicable and advantageous in all divisions except that of excavating which is a matter of labor only.

The next succeeding division naturally starts with an elucidation of concrete, which subject is almost invariably treated in two parts, first disposing of the cement and aggregates before proceeding to direct the manner of their mixing and placement.

One has merely to carry the same scheme logically through the entire specifications and thus produce a sensible, complete, well-balanced document.

Pursuing the plan of making each division independent in itself, needing only the addition of the General Conditions and Supplementary General Conditions to complete the basis for a contract, it is necessary to definitely state, under the title of each division, just what is comprehended therein. The title itself can, in no case, be considered sufficiently inclusive or conclusive.

There follows then, after the division heading, a reference to the General Conditions and a statement of the items included under the heading, thus:

DIVISION C, FOUNDATIONS AND MASONRY

NOTE. The Contract and General Conditions of these specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these specifications for Foundations and Masonry. The Contractor shall refer thereto as forming integral parts of his contract.

ART. 1. SCOPE OF WORK.

(A) THE ITEMS under this Division include:

- (1) All concrete foundations, including their reinforcement.
- (2) All common and face brickwork.
- (3) All waterproofing and dampproofing.
- (4) Such other work as is herein set forth.

These statements will serve to inform the interested party, in a general way, about what he may expect to find in this division but, for work of any size, these brevities should be elaborated. This can be done by making the foregoing more explicit or by following the first article by another wherein each subject, major and minor, is definitely enumerated without being described.

Inasmuch, however, as these enumerations are not complete specifications, the architect must guard against their being improperly interpreted as such. We proceed accordingly:

ART. 2. GENERAL DESCRIPTION.

NOTE. Under the headings in this Article, there is given for convenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following specifications, beginning with Art. 3.
(A) CONCRETE FOOTINGS shall be provided under all walls, piers and columns of main building, boiler house, coal room and boiler stack. Reinforcement shall be furnished for footings, where called for.
(B) CONCRETE FOUNDATION WALLS shall be
- - - and so on.

Article 3 immediately follows the General Description and is a complete specification of all materials needed to complete the work of this Division.

A peculiarity of specification writers (but which is, of course, not peculiar at all) is that each is most explicit and meticulous in describing those things of which he has most intimate knowledge, whereas those with which he is not on such close terms are likely to be somewhat slighted. Such weakness must be watched and carefully guarded against. A safe rule is to master the subject before attempting to go into its minutia as is demanded of one who presumes to specify it.

(To be Continued)

PENCIL POINTS

LABORATORY SPECIFICATION AND CONSTRUCTION HELPS

By OTTO GAERTNER
(Continued)

REGARDING the outlets and connections inside the hood, much depends upon the kind of work and experiments to be done. Among the outlets required for some of the work may be gas, electric with direct and alternating current, vacuum, compressed air, hydrogen, sulphide and water. Depending upon conditions and the location of the hood, the outlets may be left beside the hood or in the apron and the gas, electricity, et cetera, may be brought into the hood by means of removable tubing or wiring passing through small openings at the bottom of the hood. The controlling valves and switches may be at the outlets or if the outlets are inside the hood, they may be placed in the apron. If there is sufficient draft in the ventilating flue from the hood, the small openings at the bottom of the hood will not be objectionable and they will permit air to enter the hood so that the fumes will be taken into the flue with the air rather than be permitted to escape into the room.

The enclosed hoods are sometimes made of wood and glass but soapstone or asbestos lumber and glass are more commonly used. They are built up of one inch thick soapstone, if soapstone is used. If wood and asbestos lumber are used these materials are respectively seven-eighths of an inch and one eighth of an inch thick. Sometimes the frames and main members are made of asbestos lumber of the sizes mentioned and the remainder is made of thinner material. In all cases the sash for closing the front is made of hard wood, preferably oak. The hood may have only one working space of about four feet in width or it may have any number. The working spaces may be separated by means of partitions but usually they are not. Each space, however, has its own lifting sash with mullions between it and the adjacent ones.

First the soapstone slab bottom or counter shelf is set with its top thirty-seven inches from the floor and then box mullions are erected to hold the weights of the lifting sash which is generally seven-eighths or one and one-eighth of an inch thick. Then the sides are fitted in and the fronts are applied. The sash opening in the front is generally made about twenty-eight inches high and the front above the sash opening generally extends about a foot higher after which the front slants back to the wall at any convenient angle. The top of the hood at the wall, however, should be at least eight feet high so as to have ample space to hold fumes before they find their way into the exhaust flue. The slanting part of the front has as much glass in it as possible and so have the sides. If the hood is made higher, the vertical part of the front may also have glass in it. All the glass should be wired glass; that which is to be looked through should be clear and polished, but that which is on the slant may be what is known as rough wired glass. The mullions must extend high enough above the vertical part of the front to enable the sash to lift high enough to leave the entire sash opening clear for working.

If the hood is a long one it should have several exhaust flue openings rather than one large one. The openings may be taken to a single flue provided that the flue is large enough and has sufficient natural or forced draft. Also there should be some way of taking off heavy as well as light fumes. Sometimes an elongated opening placed vertically in the rear wall of the hood will do, but it must be so arranged that the draft will not affect a Bunsen burner flame. When the hood is a long one and only one exhaust opening can be provided, the opening should be located near the center of the hood. Sometimes a baffle plate is set on the back wall to avoid this and at the same time to distribute the draft so as to more uniformly draw out the fumes and so as not to leave some parts of the hood unventilated. Such a baffle plate should be placed perhaps two or three inches clear of the wall and so as to be several inches from the top and bottom of the hood. The sides of the plate will reach to the sides of the hood. If soapstone is used for the baffle plate, it should be seven-eighths of an inch thick, fastened at the ends and have the bottom rest on the bottom slab by

means of extension pieces about four inches wide at the ends and center. If asbestos lumber is used for the baffle plate it may be of one-quarter inch or heavier stock, and being lighter in weight, depending upon its thickness, it may not need to rest on the bottom slab. This will leave the bottom slab clear for cleaning purposes. All asbestos lumber should be specified to be put together with countersunk brass screws with the heads covered with acid-proof cement.

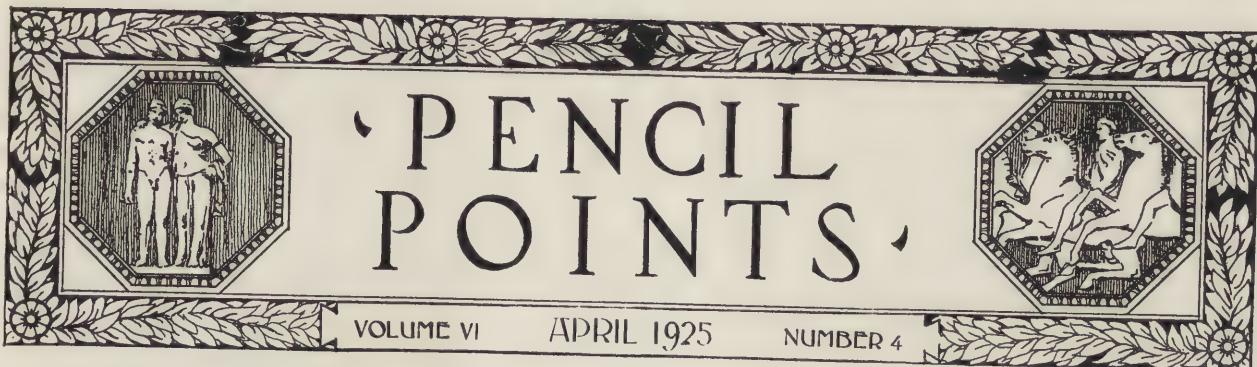
If the baffle is thin and of a large area, it may be necessary to fasten it throughout its surface by means of blocking between it and the wall behind it in order to keep it straight and even. Such blocking should be of the same material and should be circular or have rounded edges so as to cause the minimum amount of friction with the fumes going to the exhaust flue opening. All edges and offsets in the flue opening should also be rounded for this reason. The amount of air for ventilating the hoods may vary. The writer knows of fume hoods without enclosing sash and having baffle plates as described above, which are operated with from fifty to seventy feet of air per minute passing over the counter shelf. In these cases the hoods are from four feet to eight feet wide and the ventilation of fume hoods takes care of the special ventilation in the laboratory rooms through the hoods with satisfactory results both for the hoods and for the rooms. Sometimes accessible sheet metal flap dampers are placed in the fume hood exhaust flues so that when the fans connected with the hoods are not in operation there will not be any back draft caused by the general ventilating of the rooms.

This is especially necessary if a separate room where hoods are provided for experiments using hydrogen sulphide, as the odor of these fumes is very difficult to be disposed of. A good way to overcome this is to have ventilation from the laboratory adjoining this room to pass through the hydrogen sulphide room by means of louvres in the door or grilles through the walls. There should only be access to this room through the laboratory adjoining it and not from a hallway. Special apparatus must be used to produce the hydrogen sulphide and a soapstone sink with soapstone shelves over it must be specified of ample size to accommodate the apparatus as well as a cabinet to hold the chemicals. The piping from the apparatus to the hoods should be of lead with small lead tube outlets in the hoods provided with shutoffs. The exact type of outlet is best left to the instructor in charge of the work as there is a large difference of opinion regarding the best types.

For specification purposes it may be stated that terra cotta tile flues twenty inches square have been successfully used for open front fume hoods with openings two feet ten inches high and eight feet long; flues thirteen and one-half inches square have been successfully used for hoods with openings two feet ten inches high and four feet long. The same proportions have been used for hoods of sizes between those mentioned. For the twenty inch square flues, the openings to the flues are generally about eighteen inches wide and twenty-eight or thirty inches high. For the thirteen inch square flues the openings to the flues are generally about eighteen or sixteen inches wide and twenty-four inches high. Having given the area of the flue, the size of the opening to the flue and the clearance between the back of the baffle plate and the wall should be so proportioned as to give at least the same air passage as the area of the flue. That is, a twenty inch square flue would have an inside area of about three hundred and twenty-five square inches. The flue area divided by the perimeter of the opening would give a least dimension of three and one-third inches clearance for the baffle plate. As spaces become narrower it is best to add a small percentage to allow for the additional loss by friction.

The length of the baffle plate and its distance from the wall being decided upon, its distance above the top of the counter slab and its distance below the top of the hood may be determined in the same way. Usually these distances are easily attainable in the detailing of the hood and they should be made a minimum of two inches to allow for easy cleaning. Conditions in respect to the hoods and their ventilation vary so, that it is best to study each condition carefully, weigh the facts with the best theory and practice and then to decide or modify the design as may be necessary to coincide with the judgment of the designer or those who are to use the equipment.

(To be Continued)



"SELLING" ARCHITECTURE AND THE ARCHITECTURAL EXPOSITION

WE HAVE had quite a lot to say recently under the heading "Selling" Architecture," and have received a number of letters from our readers by way of comment, some of which have been published. There seems to be very considerable interest in the suggestion we made some months ago that everybody connected with the profession of architecture, in whatever capacity, whether he be an architect practicing for himself, a member of the drafting-room force or a student of architecture, should do all within his power to make known to the general public just what an architect can do in connection with a building operation and how he does it.

The Exposition to be held in the Grand Central Palace, New York, from April 20th to May 2nd inclusive, is the greatest single opportunity the architectural profession has had to establish contact with a large number of laymen who should be greatly benefited by such contact and who should, because of things they will see and learn at the Exposition be better and more satisfactory clients in connection with any building projects which they may undertake.

Two of the most important architectural organizations of the country, the American Institute of Architects and the Architectural League of New York are co-operating in this great enterprise. From a professional standpoint its success is already assured. The various chapters of the Institute have all made great efforts to secure the best possible material showing the work of their members. The League, within its own sphere, is doing the same. The scheme of decorative treatment under the able supervision of Mr. Howard Greenley has been worked out in such a way as to give an attractive setting for the Exposition. In the following pages will be found reproductions of a few of the items which will be on view. These are being published merely to indicate the high character of the material which has been assembled. A vast amount of material of equal merit will be shown, but, both because

of space limits and the early date of going to press, it has been possible only to suggest in these pages the treat that is in store for everyone who visits the Exposition. A large number of the more important producers of building materials and items of equipment and decoration are doing their share also. So from the standpoint of what the Exposition will contain and the manner in which it will be presented there need be no misgivings. It will be well worth seeing and every reader of PENCIL POINTS who can possibly get there should be among those present.

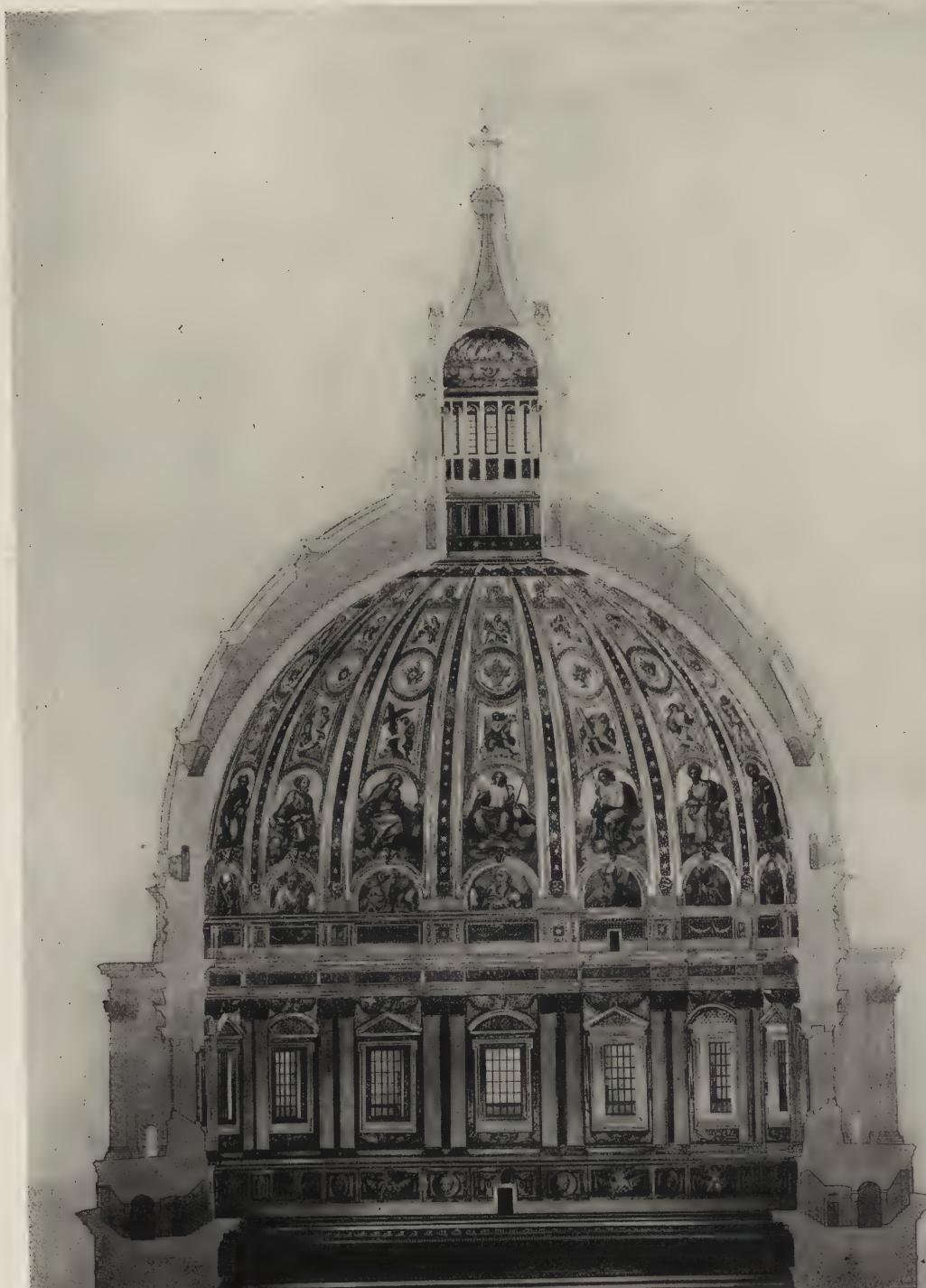
That, however, is only a part of what should be accomplished. Many laymen will no doubt attend, but right here is where each one of us should take an active part.

Tell your friends about it and get them to come. The more people not identified directly with the profession of architecture who attend this Exposition the better it will be for all

concerned. See to it that the people you know who are contemplating building know all about this Exposition. Comparatively few laymen have a complete conception of what the architect does to justify his fee. Many of them think he merely "draws up a set of plans" turns them over to a contractor who does all the work and then sends in a bill. Any one attending the Exposition will begin to realize that something more is involved, and will begin to appreciate the vast amount of work that the architect must do and direct in order that a building project may be satisfactorily carried out. No professional man does more for the money he receives than the architect does, but no profession has to contend with so serious a misconception of its functions as the profession of architecture does.

Here is a great chance to take advantage of a splendid opportunity. Let it not be said when the Exposition is over that the architects and draftsmen have not taken sufficient interest in the matter to make it a success from every angle.

PENCIL POINTS



THE INTERIOR ELEVATION OF THE CUPOLA

OF THE
BASILICA - S. PETER'S IN VATICANO

DRAWN BY

V. L. S. HAFNER - FELLOW IN ARCHITECTURE - AMERICAN ACADEMY
IN ROME

SCALE 3 1/2 ft. to 1 in.

*Interior Elevation of the Cupola of the Dome of St. Peter's, Drawn by V. L. S. Hafner.
Reproductions of Mr. Hafner's Model of the Dome Appeared in the
December issue of Pencil Points.*

ARCHITECTURE IN THE PUBLIC EYE

THE GREAT ARCHITECTURAL EXPOSITION TO BE
HELD IN NEW YORK WILL BE EPOCH-MAKING

THE ILLUSTRATIONS ON PAGES 48 TO 68, INCLUSIVE, SHOW A FEW OF THE EXHIBITS WHICH WILL BE SEEN AT THE EXPOSITION

FROM all parts of this country and from many foreign countries, examples of the work of leading architects are being sent to New York for display to the public at the Exposition of Architecture and Allied Arts to be held in the Grand Central Palace, April 21 to May 2, inclusive, 1925.

The exposition will be held under the auspices of The American Institute of Architects and The Architectural League of New York, and will combine the Fortieth Annual Exhibition of The Architectural League of New York with exhibits of architectural work from all sections of the country, selected by the Chapters of The American Institute of Architects, and comprising a widely varied, comprehensive and representative display of American architecture. The exposition, through a development of the work of the Committee on Foreign Exhibits of the Architectural League of New York, will include a large and varied display of the architecture of foreign countries.

D. Everett Waid, President of The American Institute of Architects, is Chairman of the General Committee and Harvey Wiley Corbett, President of The Architectural League of New York, is Chairman of the Exhibition Committee. They are working in collaboration with B. W. Morris, President of the New York Chapter of The American Institute of Architects, with the Chapters of the A. I. A. throughout the country and with the heads of the various committees to make this the greatest Architectural Exposition the world has ever seen. The general management and the executive administration are being directed by Charles H. Green, who has been identified with many big expositions. Robert W. de Forest, President of the Metropolitan

Museum of Art, is Chairman of the Advisory Committee. Howard Greenley is Director of Decorations.

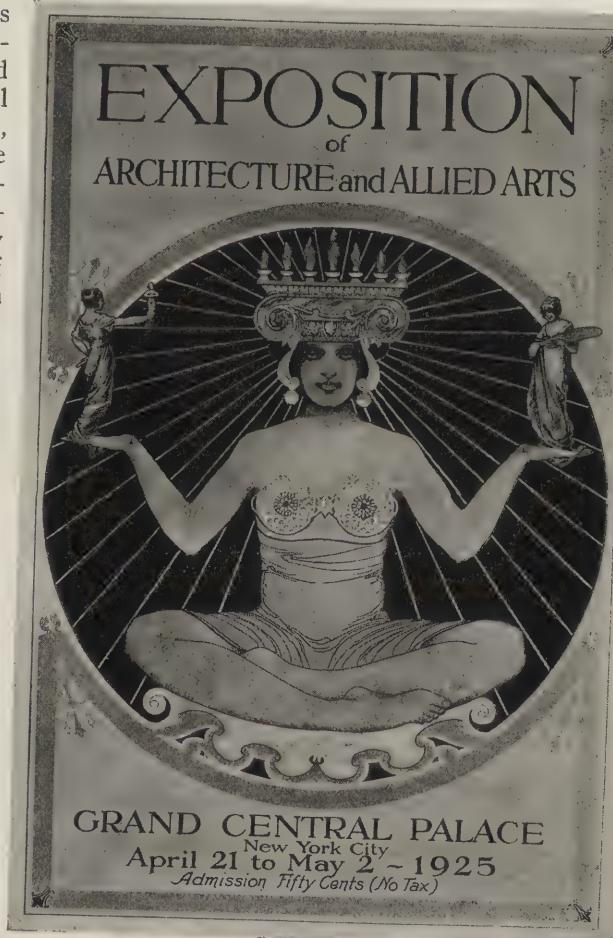
The Convention of The American Institute of Architects will be held in conjunction with the Exposition. The annual International Conference on City Planning will also be held at this time.

The exhibits, in addition to works of architecture, will include sculpture, mural painting, landscape architecture, interior decoration and craftsmanship.

Producers of materials and equipment that enter into building operations are sending carefully prepared displays showing their contributions to the building art, presented in a way to enable the visitors to the exposition, both architects and laymen, to gain information about these products in the quickest way. While the exhibits of the architects, sculptors, mural painters, landscape architects and city planners, will be the main features of the exposition, the exhibits of building materials and equipment will prove highly informative, varied and interesting.

To ensure the absence of a commercial aspect the exhibition committee has ruled that nothing shall be sold or purchased at the exposition and the exhibits must all meet the approval of a jury of architects before being allowed space in the exposition. The concentration at the exposition of these displays of the materials, equipment and furnishings of different producers will afford a convenient opportunity for all identified with the building industry to become thoroughly acquainted with the newest products which the manufacturers of America have created and placed at the disposal of the building industry.

As every effort is being made to interest and in-



The Exposition Poster.

PENCIL POINTS



First Prize Design for 1922; by Roger Varley, Beaux Arts Institute of Design.

PENCIL POINTS

and depict graphically the future of our great cities.

Among the many plans is one calling for three distinct levels, including elevated sidewalks. New Yorkers will get their first glimpse of what may actually become a realization within the next fifty years. This project was suggested by Harvey W. Corbett, at the invitation of the Russell Sage Foundation and architects who have seen the plans have compared them to those of Venice, where canals serve to carry the water traffic while walks carry pedestrians.

The whole Ruhr district which has undergone one of the greatest replanning campaigns in France, will be shown. The city plan of Rheims, plans for which have been worked over for the past five years, will be a feature of the exposition. Formerly Rheims was a city of about 125,000 people but because of its situation in an important and growing economic district the new plans were made on a basis of a population of 300,000. No efforts to change the historic atmosphere of the ancient city were made. In fact the old spirit and quaint beauty which have rendered it one of the world's most picturesque towns have been preserved in the reconstruction.

An elaborate system of Federal Highways running all through Mexico has been prepared and will be on public exhibition for the first time. An elaborate plan for the city of Washington, D. C. will be shown. Rio de Janeiro, St. Louis, Chicago and other centers that have been replanned will be exhibited.

In the opinion of one member of the committee, a prominent architect who has lately returned from a tour of Europe, Finland, Norway, Sweden, Poland and other Baltic states have successfully undertaken to develop a new and drastically different type of architecture. With the merits of any selections they may make unquestioned, the committee has left the question of the exhibits they will send entirely in the hands of the Baltic states. France will send over drawings of her historic buildings and prominent modern structures. The reconstructed war areas will be shown in the City Planning exhibits.

Efforts are being made by Major George Oakley Totten to secure architectural drawings by the ancient masters of the middle ages. Aboriginal art and architecture from Mexico is also being sought.

Among England's most prominent exhibits will be the original drawings by Sir Gilbert Scott, R. A., of the Liverpool Cathedral which was consecrated by King George and Queen Mary, last July. Sir Gilbert Scott is said to have been but twenty years old when he made these drawings. Today he is conceded to be one of England's greatest architects.

Herbert Baker, architect for the new addition to the Bank of England, is sending drawings of the famous house for Cecil Rhodes in South Africa and also other African homes. Sir Edwin Landseer Lutyens, designer of the Cenotaph, the Queen's Doll House, and winner of the Gold Prize of the American Institute of Architects is sending drawings



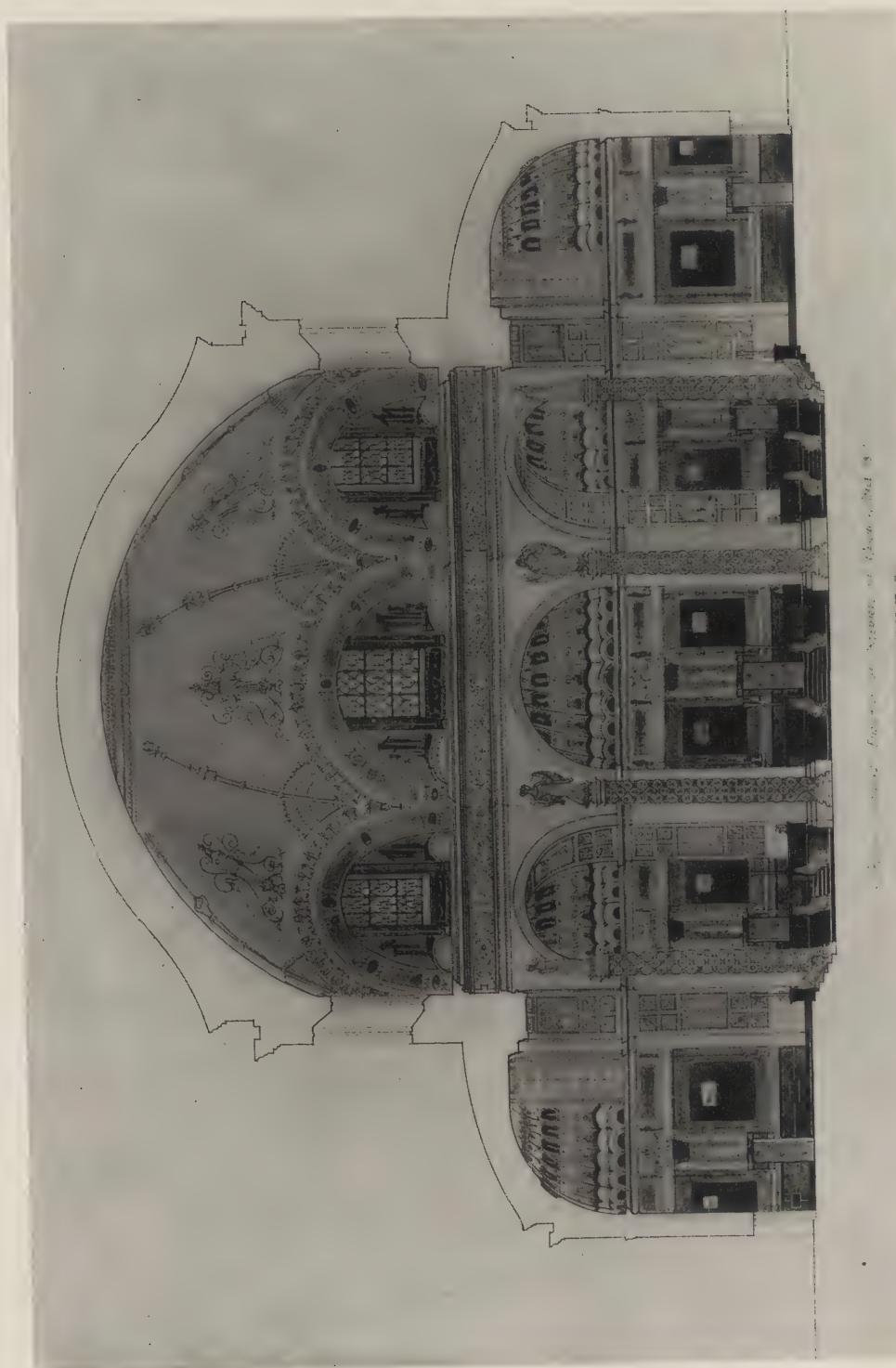
The Paisley War Memorial, Sir Robert Lorimer, A. R. A., architect, Edinburgh, Scotland. Mrs. Meredith Williams, Sculptor. One of the Exhibits in the Foreign Section of the Exposition.

form the public, a too technical atmosphere will not be given to the exposition.

Home building will be given proper consideration. The Small House Service Bureau will have an exhibit including models which are being made especially for this display, and the exhibits of materials, equipment and furnishings for the home will be comprehensive.

George B. Ford, President of the National Conference on City Planning said recently: "We expect to have an exhibition of European city planning that will be unusually complete, selective and comprehensive and in connection with the American displays, will give a panorama of the world's work in this movement."

For the first time, official drawings of the Russell Sage Foundation for a plan of New York will be shown by the Regional Planning Committee of New York and Its Environs. They are undoubtedly the most pretentious and comprehensive ever set forth



Winning Design for 1924, Annual Collaborative Competition at the American Academy in Rome. "A Casino at a Summer Resort." Sketch showing Ensemble of Interior of Casino. Henri Gabriel Marceau, Architect; Frank Schwarz, Painter; Alvin Meyer, Sculptor.



A CASINO AT A SUMMER RESORT

Winning Design for 1924, Annual Collaborative Competition at the American Academy in Rome. "A Casino at a Summer Resort." Henri Gabriel Marceau, Architect; Frank Schwarz, Painter; Alvin Meyer, Sculptor.

Drawing by Chester B. Price, Residence Designed for "House and Garden," Johnson, Kaufman and Coate, Architects, New York City.



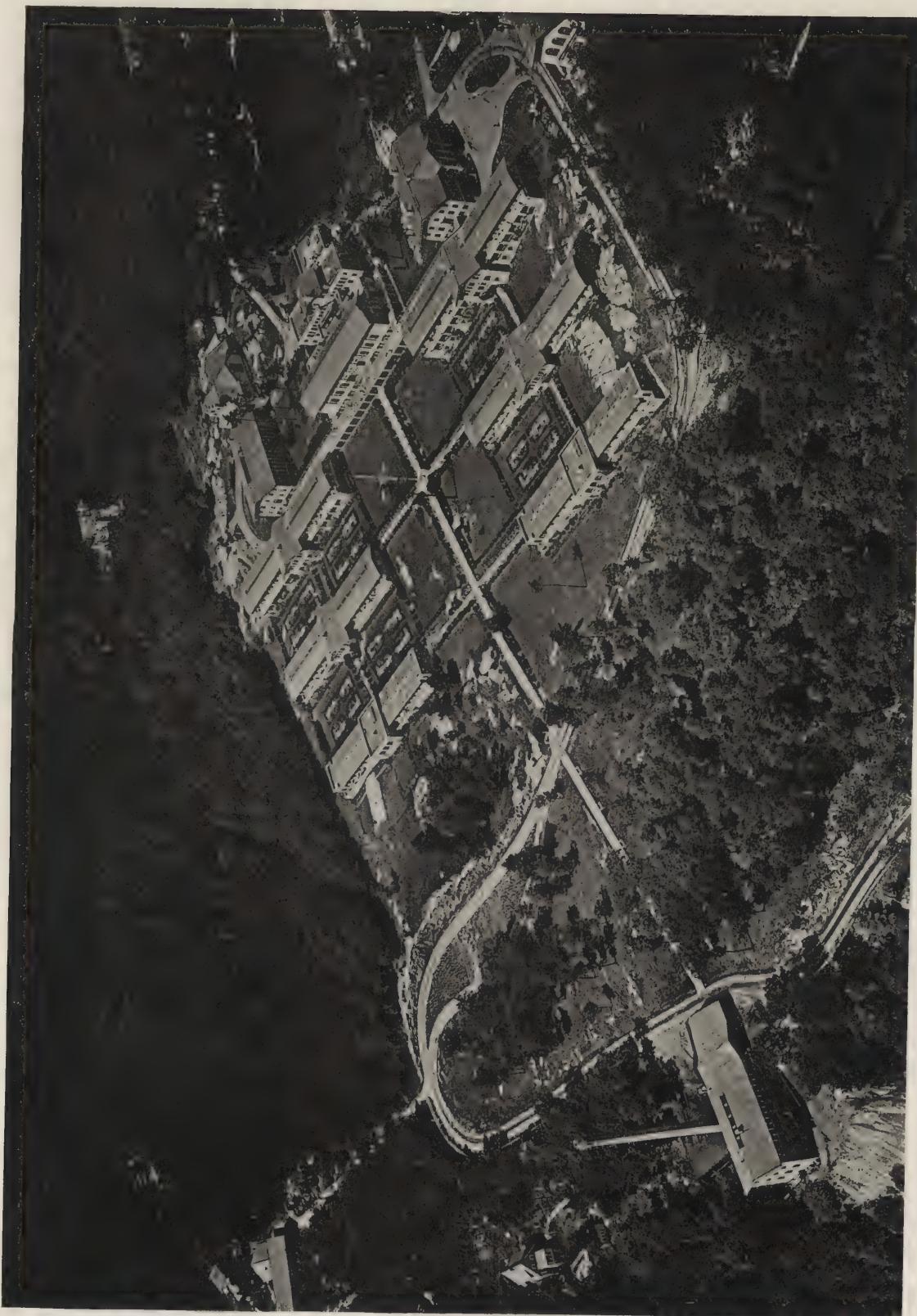


*The Colony Club, Santa Monica Bay, California. Elmer Grey, Architect, Los Angeles, Cal.
Study in Oils by Elmer Grey.*



George Washington Masonic National Memorial at Alexandria, Va. Helmle & Corbett, Architects, New York.

Rendering by Birch Burdette Long.



*Air-plane Photograph of Tuberculosis Sanatorium at Mt. McGregor, N. Y., for the Employees of
The Metropolitan Life Insurance Co. D. Everett Waid, Architect, New York City.*

PENCIL POINTS

of country homes and town buildings. Sir Reginald Bloomfield, R. A., is sending drawings of country homes and gardens; Sir Robert Lorimor, A. R. A., Thistle Chapel, Edinburgh; E. Vincent Harris, Esq., Glamorgan County Hall; Sir Ashton Webb, K. C. V. O., prominent buildings, and Septimus Warwick, Esq., F. R. I. B. A., prominent buildings.

Representative works will be sent by Spain, Italy, Germany, England, Finland, Canada, Mexico and France. While arrangements have not been completed, exhibits are anticipated from Switzerland, Sweden, Poland and Czechoslovakia.

There will be exhibited a selection of works of students of The Beaux Arts Institute of Design and the American Academy in Rome will be represented. The winning drawings of the Le Brun Scholarship will be shown from past years.

Exhibitions of work constituting memorials to four great architects who have recently passed on, namely: Bertram Grosvenor Goodhue, Louis Sullivan, Henry Bacon and Arnold Brunner, will be shown.



Charles Keck at Work on his Statue Erected to the Memory of Booker T. Washington, which will be shown at the Exposition.



F. C. Wells at Work on a Model for the Architects' Small House Service Bureau to be Shown at the Exposition.

The exhibits will be installed on four floors of the Grand Central Palace and the interior will be transformed by the architectural treatment designed by Howard Greenley and carried out under his direction. The works of architecture, mural painting and sculpture will form the centres on the various floors and around them will be grouped the related exhibits of materials and equipment. Since the number of exhibits is to be so great and the space occupied by the exposition so large, a system of indexing the exhibits, with directory boards, will be installed to enable visitors to find readily the exhibits in which they are most interested.

Thousands of visitors will come to New York for the exposition and provision is being made by the Committee of which Donn Barber is the Chairman to entertain them properly and to help them use their time to the best advantage. It is understood that arrangements may be made which will enable the greater number of visitors to arrive in New York on special trains. In addition to facilitating their getting about, the Committee of Entertainment will conduct trips of great value to visiting architects, arranging for the inspection of important buildings under special conditions which will enable them to study the solution of the problems involved. There will also be various entertainments of a social nature.

To attempt to name even a small percentage of the important American architects who will exhibit their work would be quite futile, under the circumstances, so we have simply reproduced some of the exhibits here.

This exposition will be epoch making, for it will bring architecture into the public eye, as nothing else could. For this reason, as well as for the interest it will hold for architects, it is an event of the highest importance to the profession.



Front Elevation of Dining Hall, Harvard Business School Competition, McKim, Mead and White, Architects, New York City.

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Adoration of the Peasants. Mural Painting by Frank A. Schwarz.
American Academy in Rome.

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Study by Frank Schwarz, American Academy in Rome

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The Village Square. Screen by Barry Faulkner.



Banner by Fred Dana Marsh.

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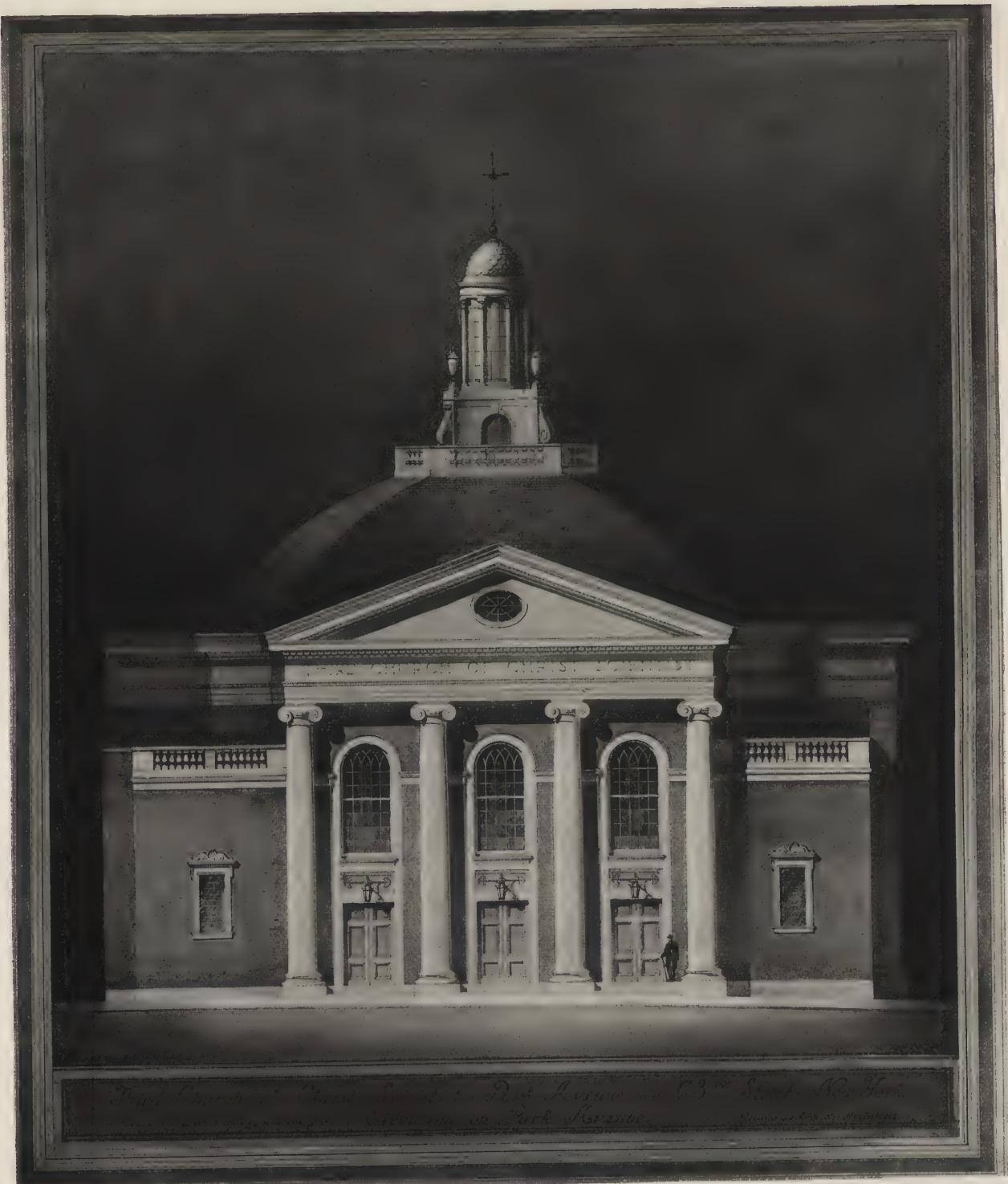


Design for Monumental Treatment of Water Supply Dam. One of the Spanish Exhibits in the Foreign Section of the Exposition.



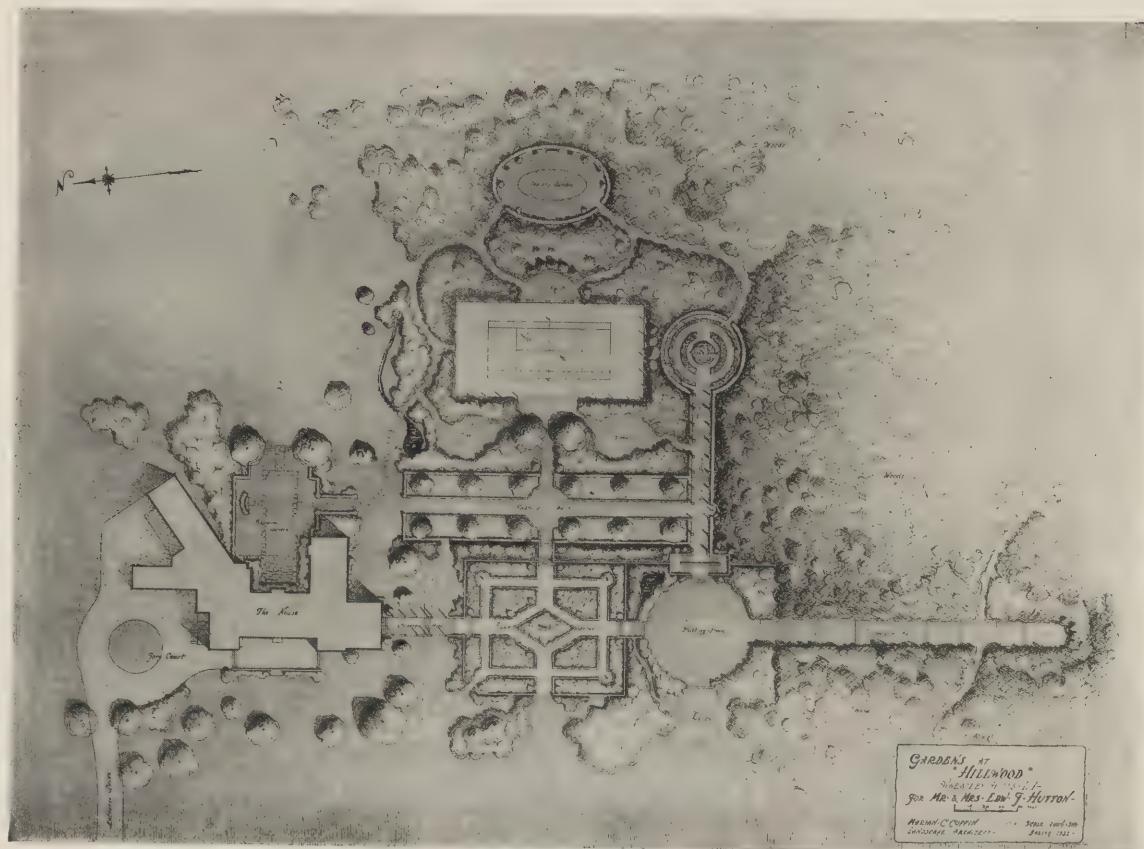
Maple Terrace Apartments, Dallas, Texas. Alfred C. Bossom, Architect.

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*Third Church of Christ Scientist - Park Avenue and 63rd Street, New York.
Architects, Delano & Aldrich.*

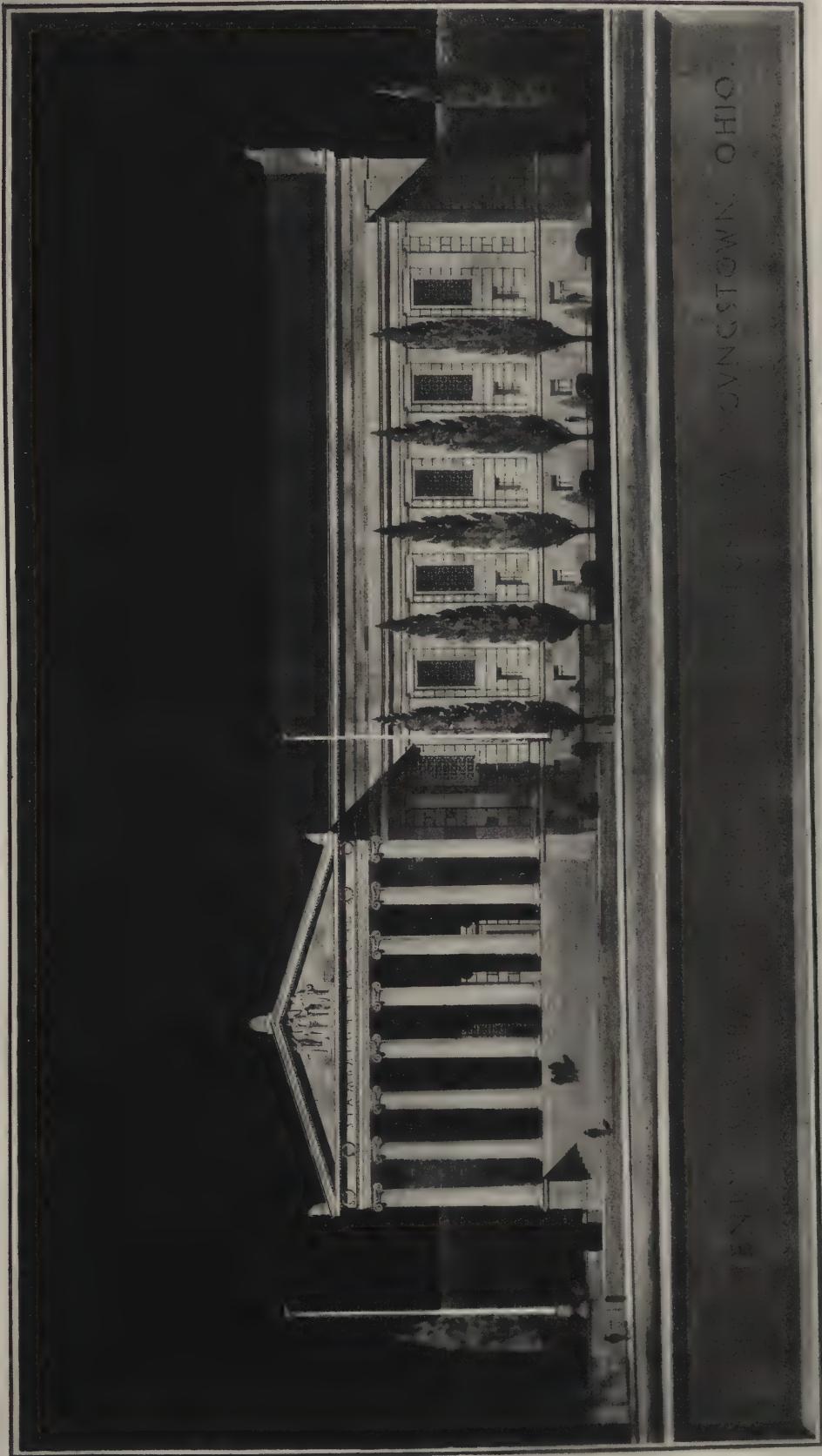
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Gardens for Mr. and Mrs. Edw. F. Hutton at Wheatley Hills, L. I.
Marian C. Coffin, Landscape Architect, New York.



Rendering by Alfred Geiffert, Jr. "Cupid's Garden," One of a Series of Gardens on a Country Estate.
Ferruccio Vitale, Landscape Architect, New York.



The Henry Stambaugh Memorial Auditorium, Youngstown, Ohio. Helmle and Corbett, Architects, New York City.



Entrance of the W. R. Coe Residence at Oyster Bay, L. I. Walker & Gillette, Architects, New York. Rendering by Howard Leigh.

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Banner by Fred Dana Marsh, Mural Painter.



Ezra Winter, Mural Painter, at Work on a Series of Panels Depicting "The American Industries," which will be shown for the first time at the Exposition.

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PLATE XIII



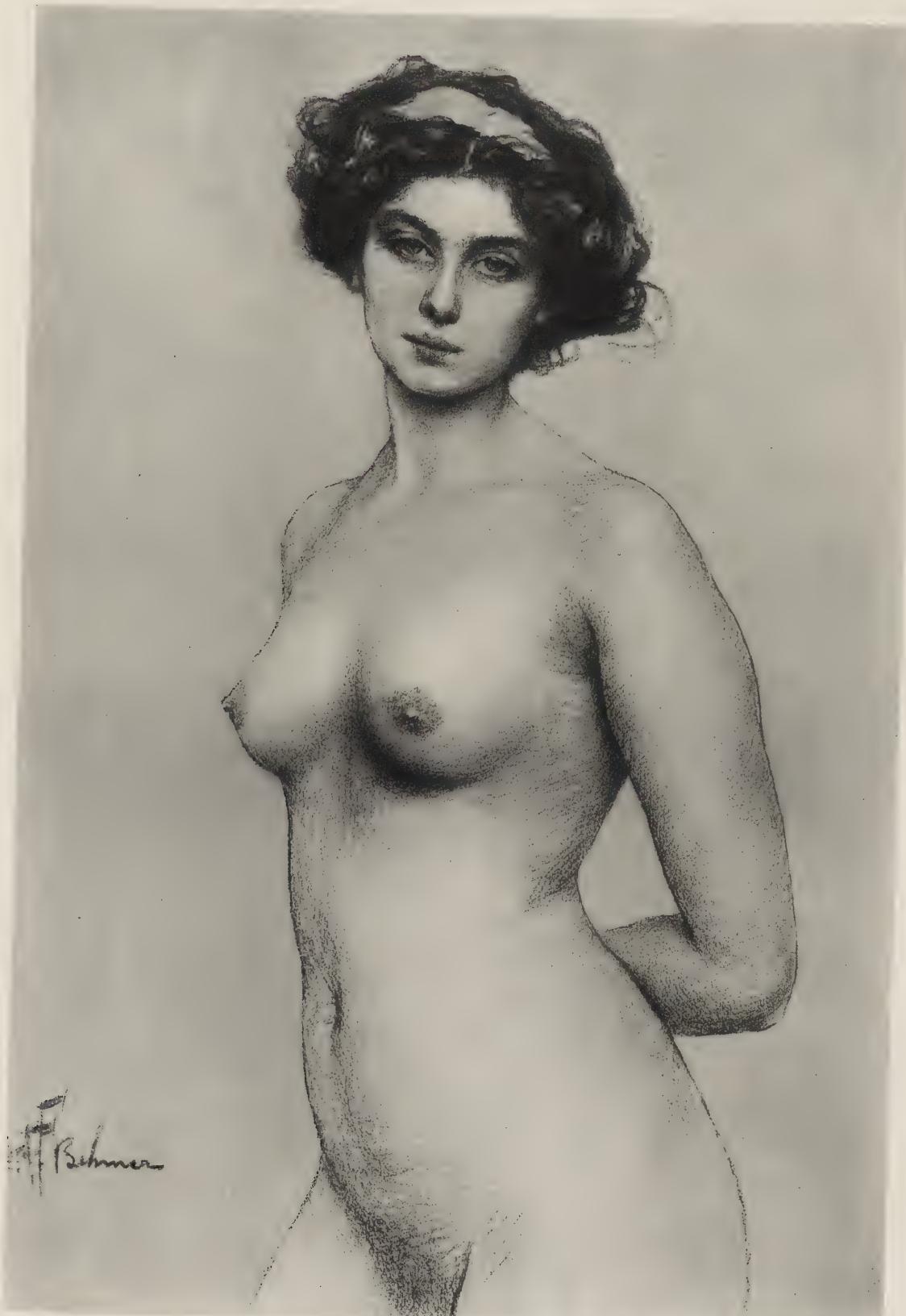
PEN AND INK DRAWING BY JOHN TAYLOR ARMS
GOTHIC DETAIL.

On the other side of this sheet is reproduced a remarkably fine drawing of architectural detail by John Taylor Arms, the etcher. This drawing renders with astonishing realism and faithfulness a subject that is most difficult to render. It gives the sense of relief, of roundness and the texture to perfection. It is also admirable in composition. Incidentally it is a tour de force in rendering, the innumerable gradations of tone of which it is made up having been produced entirely with pen and ink.

PENCIL POINTS

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PLATE XIV



STUDY BY H. FENNER BEHMER.

We are fortunate in being able to present, in the plate on the other side of this sheet, one of the best of H. Fenner Behmer's life studies, clearly showing his masterly draftsmanship. With comparatively little pencil work, the artist has admirably expressed his subject. Note the sensitive gradation of thickness and strength of line, the delicacy of tone gradation and the clean, open technique of the pencil work in the shading.

PENCIL POINTS

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PLATE XV



PAINTED SCREEN, "PORCUPINES," BY ROBERT W. CHANLER.

The painting of the screen by Chanler which is reproduced on the other side of this sheet shows the artist's skill in brush work. The vigor of the strokes that represent the quills of the porcupine is notable, as well as the sense of movement in the composition. An illustrated article on "The Art of Robert W. Chanler" appeared in the February number of this journal.

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PLATE XVI



STUDY IN OILS BY ELMER GREY.
HOUSE FOR A. N. KEMP, ESQ., SANTA MONICA, CALIFORNIA.

ELMER GREY, ARCHITECT, LOS ANGELES, CAL.
To be shown at the Architectural Exposition.

From California, Elmer Gray has sent us, in response to our request, the photograph of his painting in oils which is reproduced on the other side of this sheet. Oil colors, though seldom used for the purpose, lend themselves very well to the presentation of architectural designs in many cases, and this example is surely delightful and is well worth studying. Mr. Grey has also sent a study in oils of a club house, showing it in relation to its landscape setting. This picture is reproduced on another page of this issue in connection with the article on the Architectural Exposition, at which both of these paintings will be seen.

PENCIL POINTS

BEAUX ARTS INSTITUTE TO AWARD SCHOLARSHIPS

THIS year the Beaux-Arts Institute of Design will award two scholarships of \$500 each to the Fontainebleau School of Fine Arts. These two scholarships will be awarded by the regular jury to the two best designs submitted for the fifth Class "A" Projet of the Beaux-Arts Institute of Design, Department of Architecture. Because of these two scholarships the subject of the program already announced will be changed and the new title withheld.

To be eligible for these scholarships, the students must be American citizens, (a condition that is fixed by the Regulations of the French Government for the Fontainebleau School), and must be registered in Class "A." The usual regulations in the Circular of Information governing Class "A" competitions will apply. These scholarships will not be awarded to any student who has previously won any other scholarships for foreign travel or study. Circulars of the Fontainebleau School of Fine Arts may be secured from Fontainebleau School of Fine Arts, National Arts Club Studios, 19th Street, New York, N. Y.

ATELIER HIRONS.

AT the annual meeting of the Atelier the following officers were elected—Howard Swenson, Massier; A. F. Euston, Sous-Massier; Fred Poehler, Secretary; Joe Judge, Treasurer; Sam Bomsky, Librarian; Louis Fitzpatrick Turcotte, Chef-de-Couchon.

Word has just been received that James Gambaro will represent the Atelier as logeist in this year's Paris Prize Competition; Jimmy won a scholarship at Princeton last year and has been away all winter—studying, we hope. A. F. Euston, one of last year's logeists, is first alternate.

The Traveling Exhibition of Paris Prize drawings is being so well received that it will probably be enlarged and continued next year. Letters of appreciation and commendation are coming in fast. The Cleveland Architectural School was added to the itinerary, and a number of other requests had to be refused. The enclosed copy of an invitation sent out by Howard University, Washington, D. C., has been received. Information regarding next year's itinerary may be obtained from R. B. Thomas, 516 Fifth Ave., New York.

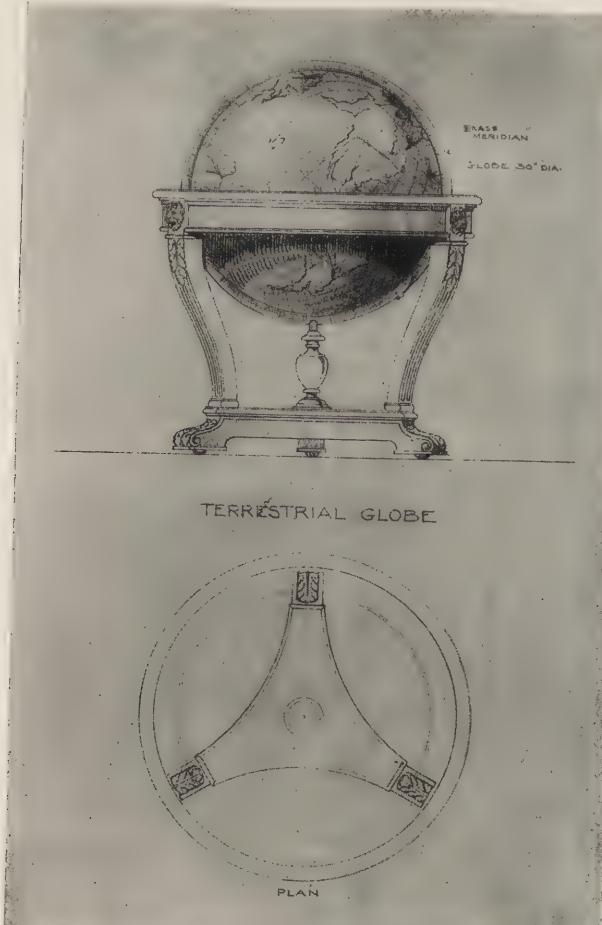
UNIVERSITY OF LOUISVILLE

THE University Archi-Arts Society is glad to announce that it has procured new quarters, into which it will move next September. As the University of Louisville is to move to its new campus next fall, the architectural department was forced to find a new location. The new quarters will occupy the entire top floor of the building used by the law department of the University and will be far superior to the present location. The quarters will be in a location convenient to all the students, will afford room enough for a good increase in students and yet leave space for a club room and will have facilities that the old quarters lacked. From all indications, the club should progress rapidly in the future and become a real help to the profession in Louisville.

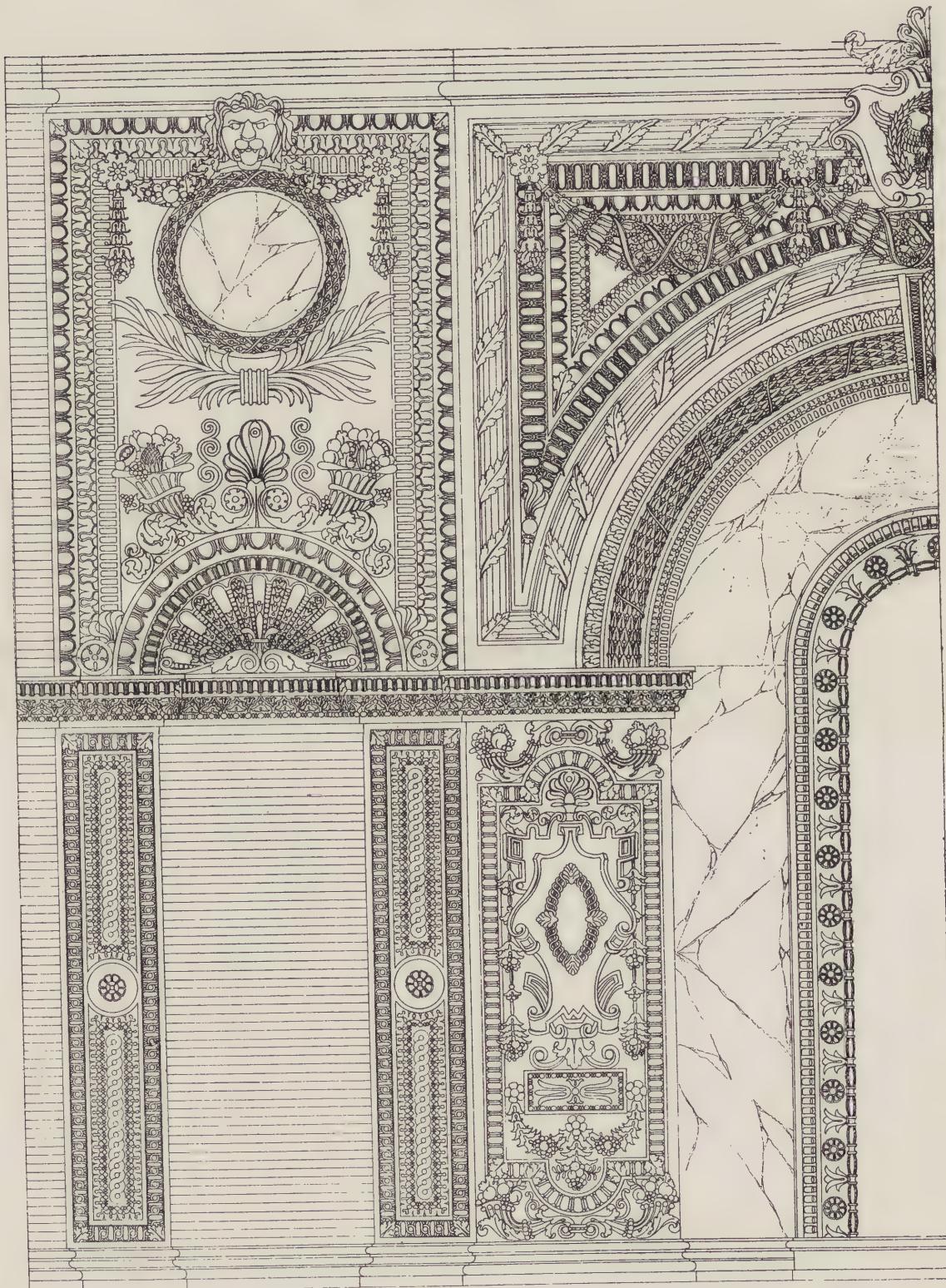
EXAMPLES OF ROMAN LETTERING

THROUGH the courtesy of McKim, Mead & White, who loaned us a copy of the book from their library, we are able to reproduce here a number of very interesting Latin inscriptions that supply inspiration and information helpful in lettering in the drafting room. These inscriptions are taken from Hübner's "Exempla Scripturae Epigraphicae Latinae" and are reproduced here at the exact size of the original plates in that book. These examples show a freedom and vigor in the design of lettering that might well be emulated today. The sources of the inscriptions are noted in the captions on the pages, the Latin of the original work having been retained. Other examples will appear in following issues.

Drawing by Francis H. Bacon.

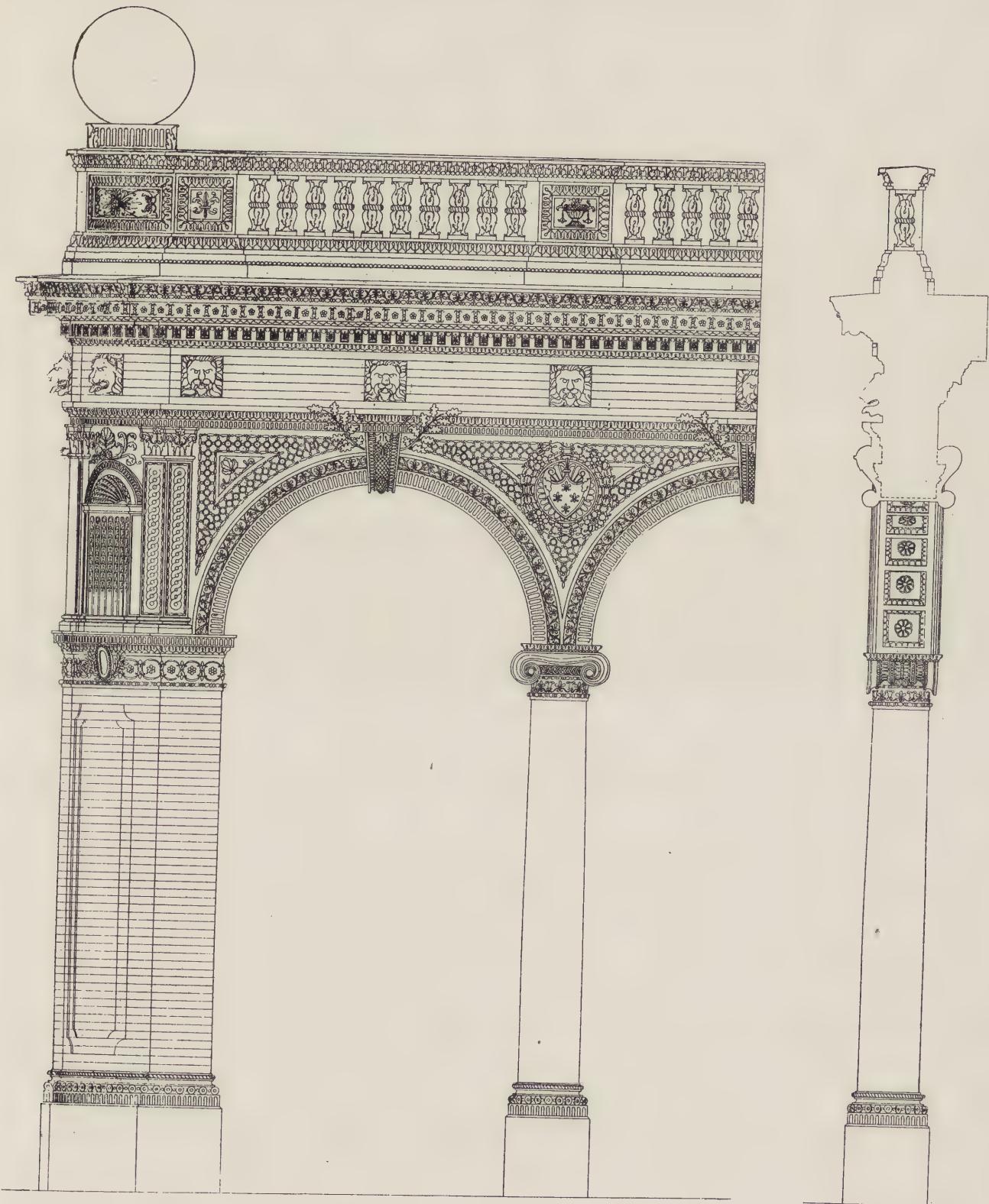


PENCIL POINTS



Drawing by Harold Van Buren Magonigle. Details of Arcade of Madison Square Garden,
New York. McKim, Mead & White, Architects.

PENCIL POINTS



Drawing by Harold Van Buren Magonigle. Central Motif of Madison Avenue Façade of Madison Square Garden, New York. McKim, Mead & White, Architects.

THE ERNVAE
M. C. RASSERVG I
1.

L A V D I O D R Y S T F
L I B V N I C P O T E S T
L I T I V S T F S T E L B A R
L I B V N V S M I L I T V M
2.

Roman Lettering from Hübner's "Exempla Scripturae Epigraphicac Latinac."

1. Pompeii, Tabula Marmorea; in Museo Neapolitano.
2. Augustae Taurinorum, Tabula, Magna Marmorea Litteris Maximis et Pulcherrimis; in Museo.

N^o. I. PUDIVS^s·F^r·CELSINVS
A EDEMISSIDISTERRAE·MOTV·CONLAPSSAM
AFUNDAMENTOP·P·S·RESTITUIT·HVN C·DECVRIONESOBLIBERALITATEM
CVMESSET·ANNORVM·SEXS·OR DIN I·SVO·GRATIS·ADLEGERVNT
1.

MNONIVS·M^rFBAL BVS·PROCOOS
BASILICAM·PORTASM VRV MPECVNIA·SSA
2.

T·C CLAVDIVS·DRVSI·F⁴
TRIBVNICA·POTES
AQVAS·CLAVDIAM·EX FONT
ITEM·ANIENEM·NOVAM·A
3.

Roman Lettering from Hübler's "Exempla Scripturar Epigraphicar Latinac."

1. Pompeii, Tabula Magna Marmorea, in Museo Neapolitano.

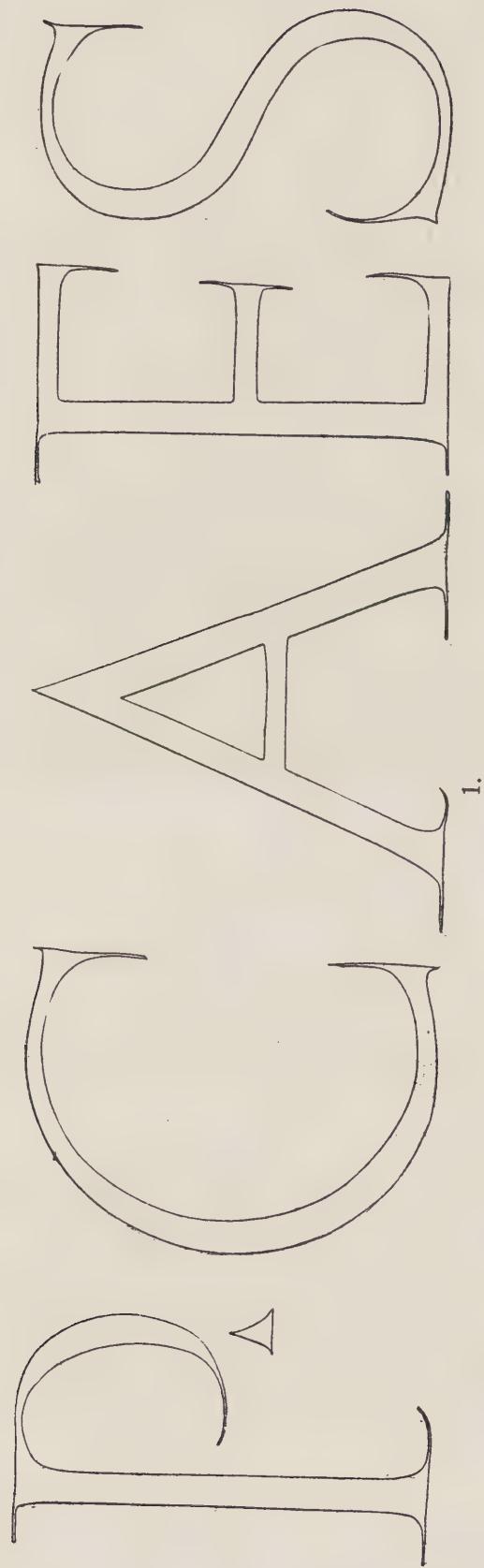
2. Herculanei, Epistylum Marmoreum; in Museo Neapoitan.

3. Romae, in Arcu Aquae Cludiae Sive Porta Praenestina.

INDICAR CÆFER RAR
TRESGOVGAIL
APPÆSIX.
CEIONIC
VIVIR
VIDVC⁴ SACRDOT
R⁴ SECT M⁴ GRAVITAT
MEVS⁴ PR⁴ P⁴ SIT⁴ EOR
ADVIDDVMEINVRBEMVENT

Roman Lettering from Hübler's "Exempla Scripturæ Epigraphicæ Latinae."

Apud Viducasses (Vieux) in Arenorica, Basis Magna Marmoreæ, in Castello Thorigny.



1.

2.

Roman Lettering, from Hübner's "Exempla Scripturae Epigraphicae Latinae."

1. *Puteolis, Fragmentum Epistylis Marmorei, Litteris Pulcherrimis; in Museo Neapolitano.*
2. *Pompeii, Fragmentum Epistylii Marmorei; Litterae Depictae Occupant Spatium 0,95 m.; in Museo Neapolitano.*

M·CLAVDIO·GF·MARCELLO
PATRONO

1.

AVEIVS·PHYLAX
N·POPIDIVSMOSCHVS

2.

PETRONI
CINTVLLI·F

3.

AGRIPPINAE

4.

MARTORIVSM·PRIMVS
ARCHITECTVS

5.

AVGVSTALI·Q

6.

CAESARI

7.

Roman Lettering from Hübner's "Exempla Scripturae Epigraphicae Latinae."

1. Pompeii, Basis Marmorea in Templo Arcis, Quod Olim Herculis Nunc Veneris Fuisse Creditur,
Ibi Extat.
2. Pompeii, Basis Marmorea; in Museo Neapolitano.
3. Novariae, Basis Ex Lapide Calcareo; in Canonica.
4. Pompeii (?), Tabula Marmorea; in Museo Neapolitano.
5. Pompeii, Tabula Marmorea in Theatro; Extat Neapoli in Museo.
6. Pompeii Fragmentum Tituli Marmorei Qui ad Arcum Tiberii in Foro Erectum Videtur Perti-
nuisse; in Museo Neapolitano.
7. Ticini (Pavia), Pars Epistylii Marmorei; in Museo Universitatis.

IMP·CAESAR·DIVI·F
AVGVSTVS
PONTIFEX·MAXIMVS
IMP^XII·COS^XI·TRIB^XIV
AEGVPTO·IN POTES^TATEM
POPVL^I·ROM^AN^I·REDACT^A
SOLI·D^ONVM·DEDIT

1.

AGRIPPINAE
M[·] AGRIPPAE[·] F[·]
DRVSI·CAESAR·MARI

2.

CAE SARI
PATRIAЕ

3.

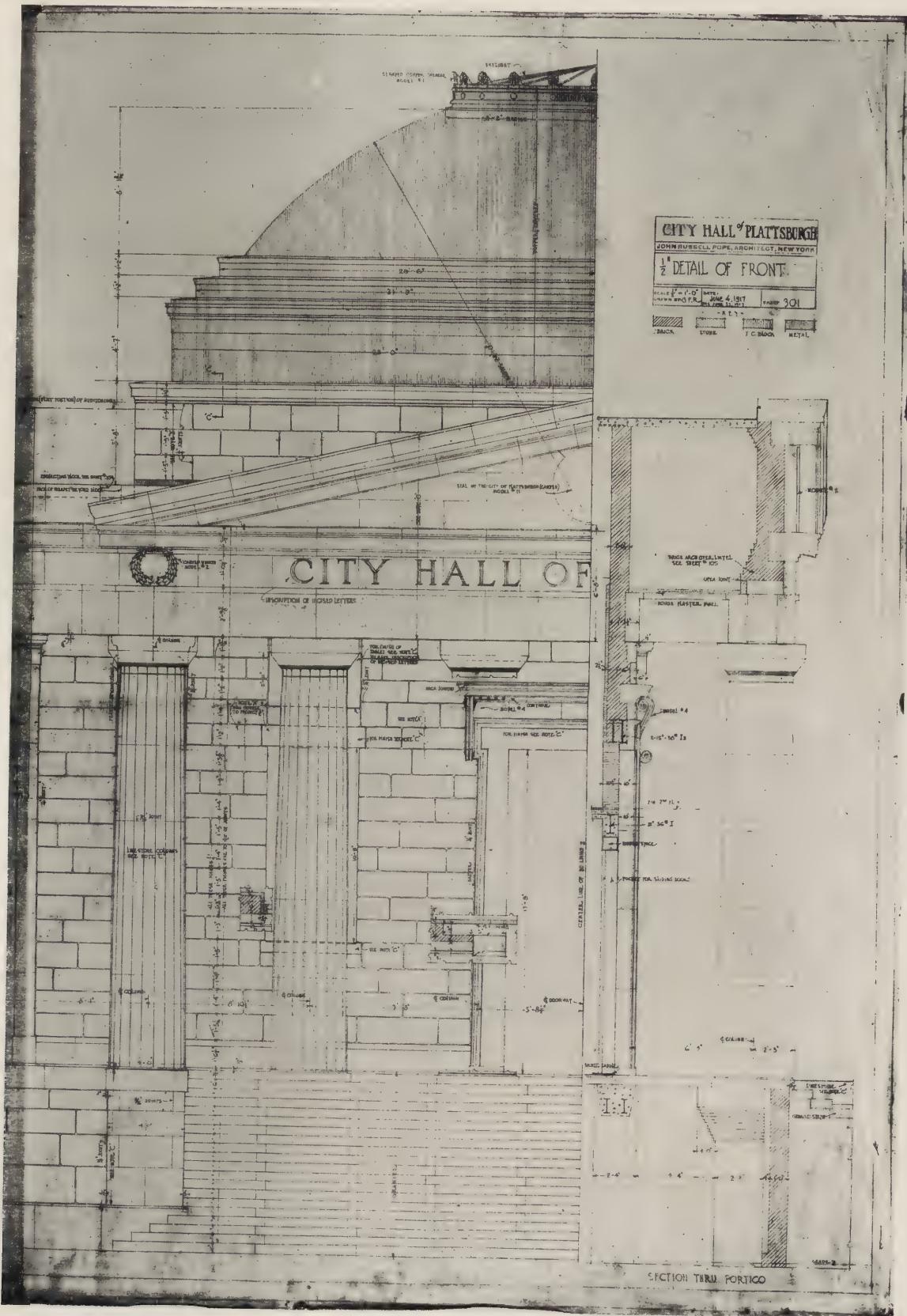
Roman Lettering from Hübner's "Exempla Scripturae Epigraphicae Latinae."

1. *Romae, in Obelisco Circi Olim Maximi, Nunc Plateae Populi; Titulus Faciei Septentrionalis. Basis Alta Est Palmos Romanos Quindecim, Lata Quoquo Versus Tredecim, Podium Eius Altum Palmos Quinque et Trientem. Idem Titulus in Obelisco in Campo Martio, Cuius Basis Alta Est Palmos Undeviginti Cum Quadrante, Lata Duodecim (Zoega). Ex Imagine Photographa.*
2. *Laude Pompeia (Lodi), Basis Marmorea; in Museo.*
3. *Pompeii, Basis Marmorea ad Aedem Fortunae; in Museo Neapolitano.*



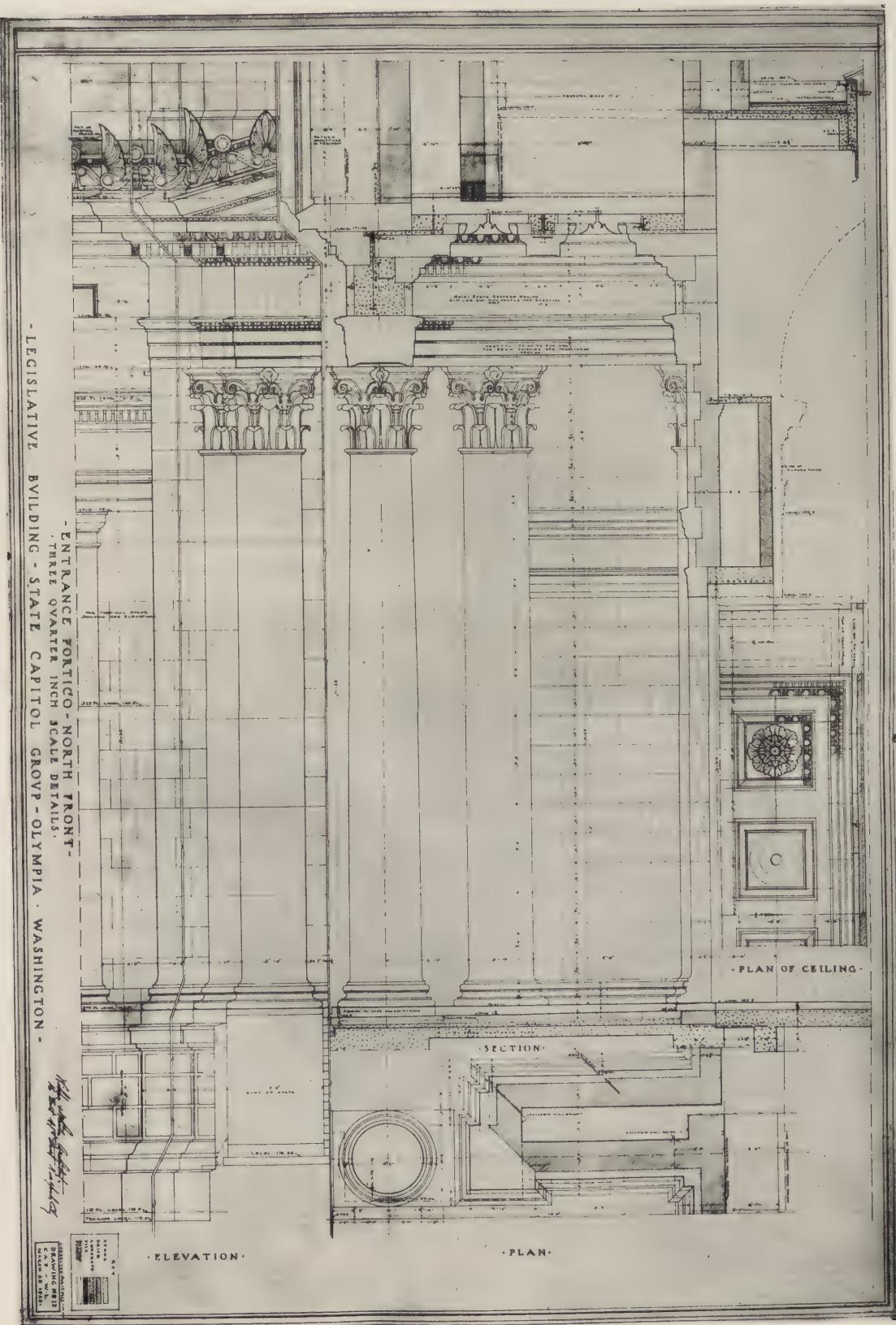
The "Congo Room" of The Alamac Hotel, New York City. Decorations by Winold Reiss.

PENCIL POINTS



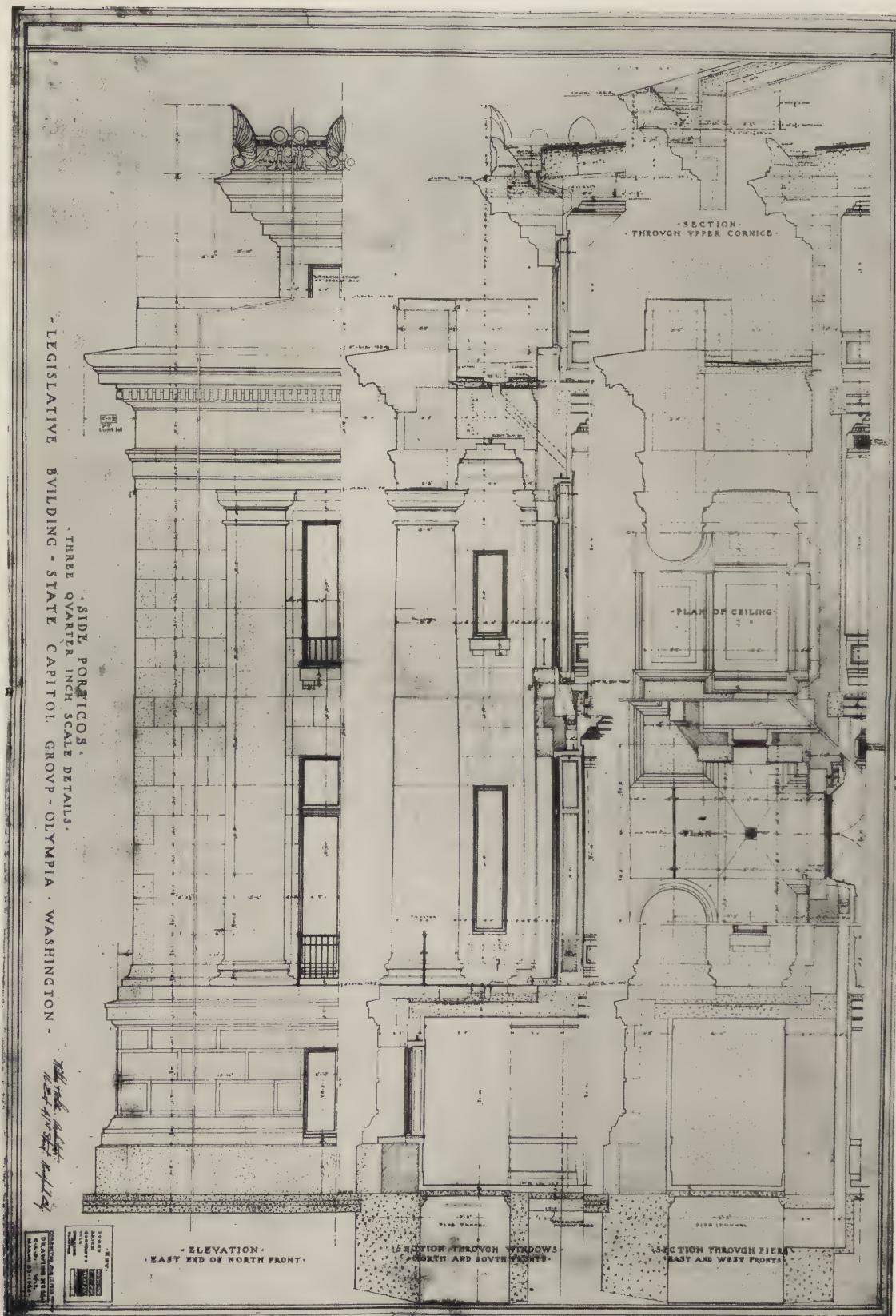
Details of Construction—City Hall of Plattsburgh. John Russell Pope, Architect, New York.

PENCIL POINTS



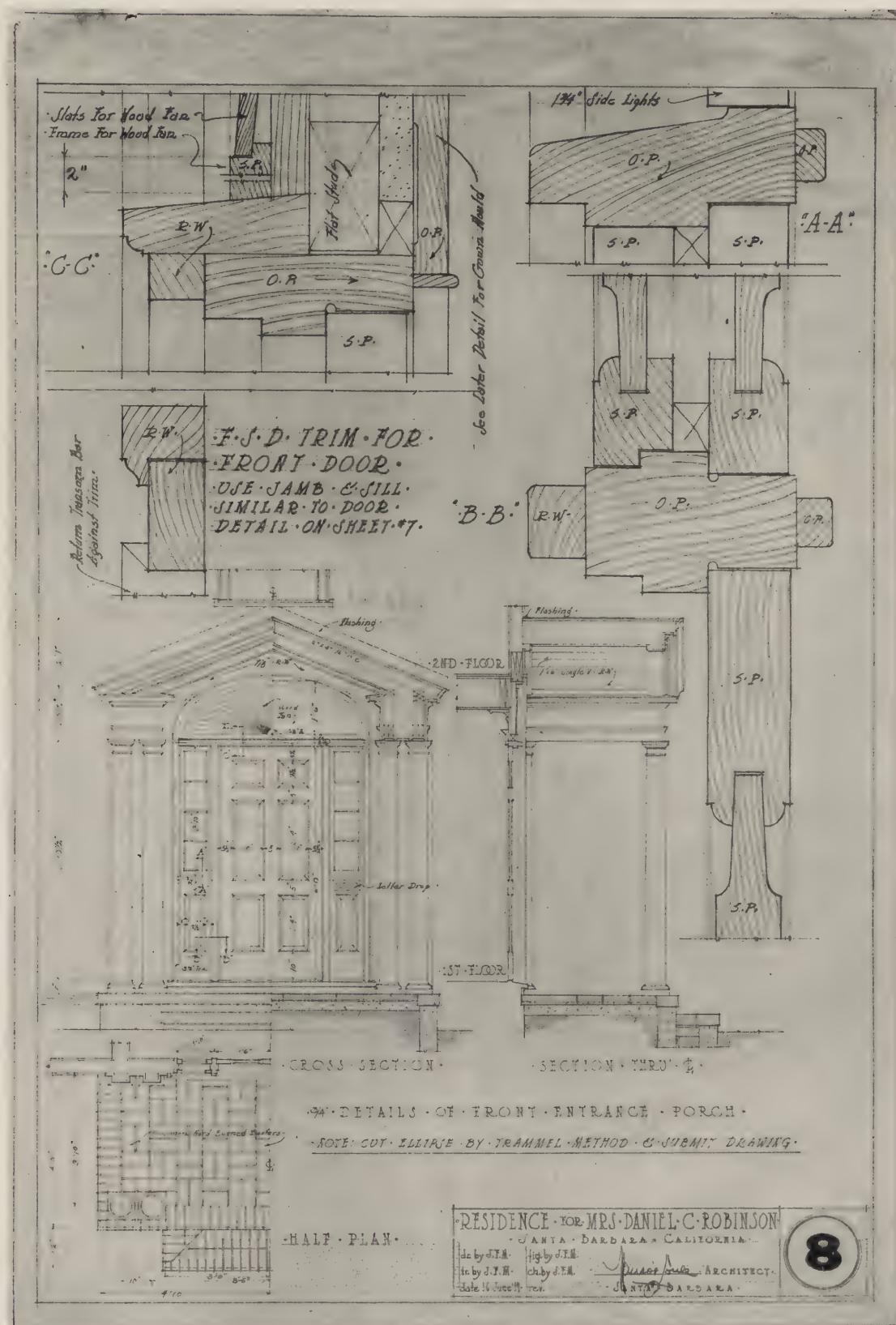
Details of Construction—Entrance Portico, North Front, Legislative Building, State Capitol Group, Olympia, Washington. Wilder & White, Architects, New York.

PENCIL POINTS



Details of Construction—Side Porticos, Legislative Building, State Capitol Group, Olympia, Washington. Wilder & White, Architects, New York.

PENCIL POINTS



Details of Construction—Residence for Mrs. Daniel C. Robinson, Santa Barbara, Cal.
Winsor Soule, Architect, Santa Barbara.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"On the 7th of this month the Collaboration Competition for the year began. One team is composed of the senior architect, Marceau, second year painter Bradford, and first year sculptor Camden. They have selected a chapel with reliefs about the altar and wainscoting—the wall surface behind the altar carrying the principal mural decoration.

"Senior sculptor Stevens, second year architect, Deam, and first year painter Finley compose another team and have elected to develop a baptistry—the altar requiring the principal sculptural treatment. The dome, spandrels, niche with domical ceiling and cloistered vaults are the problem for the painter.

"Senior painter Floegel, second year sculptor Meyer, and first year architect Douglas with Paul Simpson, Le Brun Fellow from Pennsylvania, have also taken a baptistry, with the principal sculpture a baptismal font, and the painter decorating the vaulting and glass windows.

"Joseph A. Coletti, sculptor, on the Sachs scholarship from Harvard University has enrolled with us.

"Early in the month Cyrus Dallin, the well-known Boston sculptor, visited the Academy. He was entertained at lunch by one of the visiting students and very informally addressed the men.

"About thirty students of both schools made a pilgrimage to the Palazzo Farnese during the month to study the ornamental wooden ceilings in the administrative quarters of the French Embassy. All of these ceilings are remarkable for their richness of carving, the warmth and mellowness of the wood, which is practically in its natural state.

"Prentice W. Duell, visiting architect, on a Charles Eliot Norton Fellowship, Harvard University, has been making a survey of the history of the application of color to architecture. A few days ago he brought into the Academy a complete set of color studies of the frescoes in one of the Etruscan Tombs at Tarquinia (formerly known as Corneto), where he had worked for several weeks with acetylene torches under ground. Five minutes of sunlight each day enabled him to rectify his color values and produce very satisfactory records of these early frescoes."

"We are all greatly shocked at the unexpected death of the Acting President of the Board of Trustees, Mr. Breck Trowbridge. As yet we have but Mr. Guernsey's telegram: we are anxiously waiting for a letter with full information. Mr. Trowbridge was an extremely interested and active Trustee. His death is a tremendous loss to the

Academy. Mr. Mead is in Egypt. I telegraphed him the sad news at once.

"A number of new registrations have taken place in both Schools. There are twenty-one students (17 women and 4 men) in the School of Classical Studies, and twenty-eight students in the School of Fine Arts, giving a total of forty-nine.

"There is a piece of work by a registered student, which will probably not be mentioned by the Professor in Charge of the School of Fine Arts, and I, therefore, venture to insert the following. Mr. Vaughan, a Fellow in architecture from Harvard University, has just finished a thesis on the kind of marbles and the manner in which they were employed in Roman architecture. The work should be of value to architects in general.

"Two gifts have come in. The first, \$400, was donated by Miss Agnes M. Carpenter for the purpose of completing the cataloguing of the books in the library. The second, \$100, was given by Mrs. Thomas H. Barber, for the purchase of books on art.

"The first half of Vol. V of the Memoirs has gone to press, and Vol. IV of Papers and Monographs is now out.

"The Villa between the Stolberg and the Sermoneta Villas has been bought by Mr. Mead's partner, Mr. W. Symmes Richardson. To have this talented architect near at hand will be a great advantage to the Academy, for Mr. Richardson worked with Mr. McKim for many years and was thoroughly in sympathy with the views on art, which the founder of the Academy entertained.

"Mr. George Armour, a member of the Council of the Academy, is in Rome; and so is the sculptor Mr. Dallin.

"An Englishman of considerable literary ability is preparing an article on the Academy, which he plans to submit to the *Atlantic Monthly*.

From Tenny Frank, Professor in Charge, School of Classical Studies, we quote the following:

"The latter part of December we closed the lecture room for three weeks to permit students to follow their inclinations and specialties. Various groups visited the Tuscan and Umbrian towns, while several remained in Rome to work on their chosen problems. Since several of our students are only beginning their graduate work, and six are on leave of absence from onerous college positions, we have not stressed the importance of individual investigation. Only seven students have taken problems with a view to publication, but I think that all of these will produce monographs that ought to be printed.

"At present we are having occasional lectures by Italian and foreign scholars. Professors Calza, Lugli and Munoz are as usual offering three lectures each in Italian during the Spring. Dr. Orbaan, who has written several excellent books on Renaissance Rome, spoke last week before a large audience. For February we have promises of a lecture each from Professors Cumont, Amelung, and Randall-MacIver. Professor Merrill is continuing his course in Martial, the undersigned is now lecturing twice weekly—for eight weeks—on the cultural history of ancient Rome; and all four of our staff are scheduled for lectures this Spring before the British American Archaeological Society."

ANNUAL MEETING PRODUCERS' RESEARCH COUNCIL

THE Producers' Research Council, affiliated with the American Institute of Architects, will hold its annual meeting and election of officers at the Hotel Roosevelt, New York City, April 29th, at ten o'clock. All members of the Institute are cordially invited to be present at the meeting so that they may become better informed as to the aims and objects of the Council.

LAURENCE J. McCARTY

LAURENCE J. McCARTY died at his home in Sioux City, March 10th, after a brief illness. He was graduated in architecture at the University of Illinois in 1904, since which time his has been the most familiar face to those who have visited the offices of Sioux City architects. He was for several years chief draftsman in the office of W. W. Beach, with whom he made his start in 1899. At the time of his death, he was with W. L. Steele, where he had also been associated for a number of years. His was the type of service that is difficult to measure in ordinary phrases and his passing leaves a poignant feeling of regret among all who have been in contact with him.

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SIR EDWIN LANDSEER LUTYENS

Sir Edwin Landseer Lutyens, distinguished British architect, who is to be presented with the Gold Medal of the American Institute of Architects, the Institute's highest award, at the Architectural and Allied Arts Exposition opening on April 20th in New York. Sir Edwin Lutyens has recently been commissioned to design the British Government Buildings at Delhi, India.

DALLAS ARCHITECTURAL CLUB

THE Dallas Architectural Club on March 16th, realized the dream of its six years of existence when its new home on Pacific Avenue was formally dedicated. Following the formal dedication the new quarters were officially christened with a house warming for the Club members only on March 23rd.

Inasmuch as the building is the first structure of any importance to be remodelled on the recently opened-up Pacific Avenue in Dallas, the first opening took the nature of a civic affair with addresses by the Mayor of Dallas, members of the City Plan Commission, officials of the Club and individuals who were responsible for the realization of the completed work. The trend of these talks was that the Architectural Club has set a splendid precedent for future work to be carried on in the remodelling of structures on this new street and it would well behoove the property owners thereon to profit by the Club's example.

On the 23rd of March the opening to members of the Club was of a most informal nature with just such entertainment and just such spirit as can only be prevalent among architects, builders and draftsmen on like occasions. Details of this latter program will be spared the reader but he is at liberty to make free use of his imagination. Suffice it to say, that the Club has now been officially and legitimately dedicated and baptized and it remains for the Building Fraternity of Dallas to make full use of the premises in the carrying on of the Club's ideals.

Both the plan and the perspective drawing of the Club have previously been published in these columns and the

Club hopes to present shortly to the readers of PENCIL POINTS both interior and exterior photographs of its accomplishment.

Too much cannot be said of the spirit of the Building Fraternity of Dallas in the completion of the Club Building. Donations in cash, material and labor were given in a spirit that was as agreeably surprising as it was commendable. Lack of space prevents the giving of credit to all of those to whom credit is due, but the mention of the names of Mr. C. D. Hill as Chairman of the Building Committee, and of Macon O. Carder, Ex-President of the Club, under whose regime the plan was born and under whose care the erection was carried on, is necessary. The whole-hearted co-operation of Mr. W. H. King, the Contractor on the work, also cannot go without comment. The design of the project is the combined product of Dudley S. Green and Ralph Bryan.

The Club now has a membership of considerably over two hundred and it remains for the present administration with Mr. Edward F. O'Brien, Jr., as President, and future administrations to so direct the Club's activities as to make of this building the home of the Dallas Building Fraternity from now on.

WHAT IS THE ANSWER?

FROM time to time we get letters from students as well as from draftsmen, raising the question as to what sort of future a man may reasonably look forward to in the profession of architecture. We print herewith a letter received this month from one of our subscribers and invite discussion of its contents. Does or does not the profession of architecture as at present organized offer reasonable opportunities? Is the success or failure of the individual solely dependent upon his abilities and energy, or is there something in the situation holding a good man back? We shall be glad to hear from those of our readers who care to contribute to this discussion.—Editor.

"You ask for suggestions, here is one, which I think is very close to all architectural draftsmen, especially to those who are around 40 years of age, like myself, and that is—what is their future? My own experience and I think it is one of the common average, is that of a good education, a taste cultivated to appreciate beautiful surroundings, a "line of talk" (it sounds egotistical to say personality) whereby I can hold my end up in conversation with almost any company, and yet, after 20 years of pencil pushing, I am nowhere, particularly as regards finances, yet at a time of life where I must begin to reckon on where will I be 20 years from now. Hitherto my salary has about been absorbed in keeping my family in a respectable condition and with congenial surroundings, also it has been one which, when the particular hard and heavy thinking job has been put on cloth and the work petered out I have been asked to "peter" too. It seems that so long as a man is content with \$60 or \$65 a week his job is usually permanent. Directly he can command, and is worth more, he becomes a "floater," at least this has been mine and the experience of many other men I have met in architects' drafting rooms, so that by middle life they have lost initiative and eyesight and become round shouldered over a drafting board. Of course, I refer to the majority of cases where a man has no private income which he can rely on during slack times and rainy days. Unless a man has private backing and influential friends an architect's office is about the worst place I know of if he ever wishes to get anywhere. I always feel sorry for a young man in the twenties, starting out over a board. He is usually full of "pep," has high ideals of what architecture is, works for a low salary because the work is congenial; after he has been at it 15 or 20 years his ideas are absolutely the reverse. This is a condition of the architectural profession which young men, also their parents, would do well to ponder over before taking up architecture as their life's work and I feel you would save many a bright, brainy, young man much anxiety if you would open your columns to discussions on this subject. In one office I know of the draftsmen have to punch a time clock; in another, thirty were laid off a week before last Xmas; in another, several of the higher salaried men were "fired" because work "petered out." Such has been my experience for years past. Can anyone suggest a remedy? I would like to read the experiences of others."

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THE PITTSBURGH ARCHITECTURAL CLUB

THE Pittsburgh Architectural Club in conjunction with The Pittsburgh Chapter of The American Institute of Architects and The Associated Artists of Pittsburgh, held its annual Beaux-Arts Ball in the ball room of the William Penn Hotel on the 20th of February.

The ball is now looked forward to in Pittsburgh as one of the high lights of the season's social affairs.

By all attendants of this year's ball it was generally accepted as being the most successful. Approximately 700 revelled from early evening till the small hours of the morning. Costumes from the ice bound wastes of Alaska to the tropical sands of India filled the ball room. Sheiks of Arabia, nobles from Europe's middle ages and peasants of every nation joined without thought of class distinction in making the ball a success.

A grand march for viewing of costumes and awarding prizes, together with some stunt dances were features of the evening.

Mr. E. C. Stiles was chairman, representing the Pittsburgh Architectural Club, Mr. Douglas D. Ellington was chairman, representing the Pittsburgh Chapter of American Institute of Architects and Mr. S. A. McDonna, was chairman, representing the Associated Artists. All worked in unison to produce in decorative, lighting and musical effects the best ball yet held. Much credit is due them.

President Crumpton has named the following committee to outline a program and act as judges in "Charette" Competition of summer sketches: Edward J. Weber, Chairman, E. W. Boyer, Henry Hornbostel, J. V. Wilson.

The club has made the first step toward its Fifteenth Annual Exhibition to be held in the Carnegie Galleries during February, 1926, by naming the chairman, William B. Chalfant.

On the evening of the 27th of February, 43 members dined at the General Forbes Hotel, after which the regular monthly meeting was held in an expeditious manner to allow the bunch to lockstepit to the Gayety Theatre for the finishing touches to the evening.

E. H. Steffler, *Secretary.*

SIGMA UPSILON ALPHA OF SYRACUSE UNIVERSITY

DUe to an unusually difficult design schedule this year, we have been rather inactive thus far. However, we are making plans for a rather busy spring, and expect to keep things moving in the Department during the remainder of the year.

We are sponsoring a series of supper-lectures, open to all students of architecture, and to others interested, including architects and draftsmen from the offices in the city. These talks are held in the Seminar Room of the College of Home Economics, in the same building with the department of Architecture. A satisfying repast, served by pretty co-eds precedes the lecture, and helps to stimulate interest.

The first of these talks was given by Mr. George C. Hannum, on "Acoustics and Sound-Proofing."

The second was held Tuesday evening, March 17, the speaker being Mr. William J. Pike, President of the Pike Studios of Rochester, N. Y. His subject was "Stained Glass Windows and their Manufacture." The lecture was supplemented by drawings, slides, etc. Interest in the lecture was heightened by the fact that a number of churches in Syracuse have stained glass windows designed under the direction of Mr. Pike.

Among the events we are planning for the near future are our regular initiation for new members, covering a period of one week, the annual Department banquet, and the sponsoring of the annual Moving-Up-Day Parade, for all Freshmen of the University. A cup will be awarded for the best float entered in this parade, by any group of Freshmen representing a college or department of the University.

I shall be glad to send you information regarding these and any other affairs that we shall attempt this spring as they approach.

In closing allow me to state that the popularity of PENCIL POINTS among the students here is increasing continually, and the next issue is always eagerly looked forward to.

Keith A. Marvin.



LEONARD ASHEIM

LEONARD ASHEIM, winner of the Leoni W. Robinson Memorial Medal for Excellence in Architecture awarded by the Architectural Club of New Haven in memory of the Club's first president, started his career as an architect while still in High School when he worked in the office of Joseph A. Jackson for a period of three years. After his graduation he entered the office of, and studied under, A. G. Richardson of Boston for one year, at the same time attending courses at Lowell Institute. Mr. Asheim opened his own office at Waterbury, Conn., twenty-eight years ago and practiced there for ten years, when he formed a partnership with E. G. W. Deidrich of New York City. Two years later Mr. Asheim established an office in Bridgeport, Conn. Mr. Asheim is a member of the Connecticut Chapter, A. I. A., the Architectural Club of New Haven and is Vice-President of the Bridgeport Association of Architects.

INDIANAPOLIS ARCHITECTURAL CLUB

THE Indianapolis Architectural Club, at its recent election, placed its cares in the hands of Wm. Henry Harrison, President; Howard L. Hartman, Vice-President; Geo. E. Hoagland, Secretary; and Orville Williamson, Treasurer. The election followed a banquet and entertainment at the Hoosier Athletic Club. Plans for the year's work were discussed and committees and their respective chairmen appointed.

The Club has affiliated with the Inter-Club Council of Indianapolis, (a co-operative organization representing all civic clubs of the city) and will devote a fairly large part of its activity along civic lines this year.

The Club members attended the annual convention of the Indiana Society of Architects, held at the Indianapolis Athletic Club this spring, and derived much pleasure and inspiration from the associations thus afforded. A very fascinating entertainment and banquet closed the convention. The principal speaker, Irving Pond, architect, spoke upon the "Theory of Education as Related to Art" in a most instructive manner.

DRAWING AN ELLIPSE

THE interest aroused by Egerton Swartwout's reference to a quick method of drawing an approximate ellipse, in one of his articles in PENCIL POINTS, continues. Henry Oothout Milliken has been good enough to send in two drawings which are reproduced on page 96 of this issue.

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THE NEW YORK ARCHITECTURAL CLUB, INC.

THREE will soon be ready for distribution printed circulars, setting forth the aims and ideals of this great club. They will also give a general outline of the various schemes for financing the project and will be the first step in a whirl-wind campaign to enroll members and sell bonds. The club is now organized, incorporated and recognized by leading architects in this city and there is no reason why we should not have an enrolled membership of 2,000 men before Fall. The 500 names secured by the Bowling League will be turned over to the Membership Committee as a start.

A Constitution has been adopted which will read as follows:

ARTICLE 1.

NAME

The name of this association shall be *The New York Architectural Club, Inc.*

ARTICLE 2.

OBJECT

The object of this association is to bring together in the bonds of Fellowship all men associated with the architectural profession, and its allied arts, of New York State and surrounding States, through the medium of social, athletic and educational activities; secondly to promote the spirit of co-operation between employer and employee; and thirdly to work in harmony with all other recognized organizations in the architectural profession and its allied arts.

ARTICLE 3

INCORPORATION

This association is incorporated according to the laws of the State of New York under the corporate name *The New York Architectural Club, Inc.*

ARTICLE 4

MEMBERSHIP

Membership in this association comprises three classes: A. Active Members, B. Associate Members and C. Honorary Members.

Active members shall be citizens of the United States of America, directly employed by practicing architects. They shall be eligible to vote at all regular meetings, hold office and serve on committees.

Associate members may either be representatives, employees and members of the firms in the allied arts, or architectural men from foreign countries directly associated with the architectural profession. They shall be eligible to vote at annual meetings for the election of officers and directors.

Honorary members shall include the President and Vice-President of the United States, the Governor of New York State, their cabinet members and military aids; also a limited number to be selected from the following:—practicing architects, artists, sculptors, engineers and professors and laymen having won citation for exceptional services rendered to architecture or country. They shall not be eligible to vote but may serve in an advisory capacity on committees.

ARTICLE 5

GOVERNMENT

The government and management of this association shall be entrusted to a Board of Directors of twenty-one active members who shall direct the affairs of the association in accordance with the Constitution and By-laws. This Board shall be composed of eleven officers and ten other directors all elected from the ranks of active members in good standing.

ARTICLE 6

AMENDMENTS

This Constitution may be amended by a two-thirds vote of the active members present at the regular annual meeting of the association or by a three-fourths vote of the active members present at any special meeting called for that purpose, providing that a notice setting forth the proposed amendment shall have been sent at least two weeks previously to every active member in good standing.

Seven active members in good standing will be elected to the Board of Directors for three years at each annual election.

The eleven officers shall be:

President	5th Vice President
1st Vice President	Corresponding Secretary
2nd Vice President	Recording Secretary
3rd Vice President	Financial Secretary
4th Vice President	Treasurer
	Sergeant at arms

The annual elections shall be held on the first Tuesday following the first Monday in April. The temporary Board of Directors which will function as such until the first annual election is as follows:

1. G. A. Flanagan	Donn Barber
2. E. J. Burke	Andrew J. Thomas
3. N. T. Valentine	Starrett & Van Vleck
4. E. L. Capel	A. C. Bossom
5. W. W. McBurney	Peabody, Wilson & Brown
6. M. L. J. Scheffer	Donn Barber
7. S. R. Paradies	McKenzie, Voorhies & Gmelin
8. G. B. Kayser	James Gamble Rogers
9. Charles Hess	McKim, Mead & White
10. L. H. Smith	Warren & Wetmore
11. J. A. Finegan	Sommerfeld & Sass
12. C. L. Elliott	Starrett & Van Vleck
13. H. G. Poll	Cass Gilbert
14. D. M. Plum	Walker & Gillette
15. J. H. D. Williams	Delano & Aldrich
16. R. S. Heinerwald	Guilbert & Betelle
17. E. Weck	J. E. R. Carpenter
18. E. D. Thomas	Thos. W. Lamb
19. C. B. Deer	Schultz & Weaver
20. W. H. Dowling	W. L. Stoddart
21. George Culhane	Kohn & Butler

Following is a letter from Mr. Cass Gilbert, Architect. This letter is one of a series received by the Club Committee of the Bowling League:

"My dear Mr. Valentine:

My attention has been called to the subject of the proposed Architectural Club and I recall that at a meeting of the Bowling Club about a year ago I urged the suggestion, thus renewing an idea which I have often expressed.

I am heartily in favor of the establishment of an Architectural Club for the benefit of draftsmen and practicing architects provided that it is founded upon a sound substantial basis and under a constitution and by-laws that would preserve its best interests, and under a board of directors and officers who would guide it in a conservative and wise manner. In short, a foundation that should be substantial, permanent and valuable to the community. I would point out that such an organization wisely established would no doubt be of very great value to all concerned, but if it should fail of its purpose would be proportionally damaging. I have confidence to believe that there are enough men who are imbued with the right spirit to carry on such a good work and that they would have the necessary support.

I should be very glad to assist in any way that I can in the development of the project and wish it all possible success. I am

Very sincerely yours,
(signed) Cass Gilbert.

Architectural Bowling League Division

The unusually warm February and March days brought on the first symptoms of Spring Fever and a realization that the end of the bowling season was not far off. So committees were appointed to arrange for a medal design and silk pennants as well as the annual dance at the Ritz Carlton and the annual dinner at the Savarin.

A program describing the medal design competition was distributed to the various officers in the League and the drawings submitted were voted on at a regular meeting of the Board of Directors at the Hotel Shelton, Tuesday, March 3rd. The design by Mr. Andrew F. Euston, of Sommerfeld & Sass, was adjudged the winner by a narrow margin over the design submitted by Mr. Herman Ganter, Jr., of James Gamble Rogers. The winning design will be modelled and worked up by the Medalllic Art Company of New York City. There will be eighteen medals in sterling silver and five in solid gold presented for the various winning points.

Silk pennants to become the permanent property of the offices under whose names the winning teams bowled will be presented in conjunction with the League trophies.

The final standing of the five man tournament is as follows:

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Standing

NAME OF OFFICE	No.	Games Played	Games Won	Games Lost	Team Average	High Score	Percentage
1 Cass Gilbert	25	24*	1	750*	868*	.960	
2 Guibert & Betelle	25	F.I.	21	4	744	819	.840
3 Donn Barber	25		20	5	689	776	.800
4 McKenzie Voorhees & Gmelin	25		19	6	721	809	.760
5 Warren & Wetmore	25		19	6	714	842*	.760
6 W. L. Stoddart	25		19	6	707	800	.760
7 James Gamble Rogers	25		19	6	680	823	.760
8 Starrett & Van Vleck	25		17	8	686	767	.680
9 Peabody Wilson & Brown	25		15	10	667	815	.600
10 A. C. Bosson	25		15	10	657	737	.600
11 Shape Bready & Peterkin	25		14	11	651	739	.560
12 J. E. R. Carpenter	25		14	11	625	741	.560
13 McKim Mead & White	25		13	12	650	768	.520
14 Schultz & Weaver	25		12	13	610	705	.480
15 Holmes & Winslow	25		12	13	592	707	.480
16 Thomas W. Lamb	25	F.I.	10	15	630	720	.400
17 A. F. Gilbert	25		9	16	607	765	.360
18 Kohn & Butler	25	F.I.	8	17	634	720	.320
19 Andrew J. Thomas	25		8	17	598	720	.320
20 York & Sawyer	25		8	17	579	642	.320
21 Schwartz & Gross	25	F.I.	7	18	597	697	.280
22 Benjamin W. Morris	25	F.I.	7	18	596	696	.280
23 John Russell Pope	25	F.I.	6	19	596	722	.240
24 Patterson King Corp.	25		6	19	525	680	.240
25 Sommerfeld & Sass	25	F.I.	1	24	588	663	.040

High individual average—King of Guibert & Betelle, 172½

High team average—Cass Gilbert, 750.

High individual score—Smith of Warren & Wetmore, 238

High team scores { Cass Gilbert, 868.
Warren & Wetmore, 842.

The annual dance this year will be held on Friday evening, April 17th, at the Ritz Carlton. Fortunately the services of the same orchestra that played for us last year have been secured so that those who are planning to go this year may be assured of the finest music in New York. It is expected at this time that the tickets will be about \$7.00 per couple. They have been distributed among the various officers of the League and may be secured from the representatives or by writing direct to N. T. Valentine, Chairman of the Dance Committee, care Starrett & Van Vleck, 8 West 40th St., New York City.

The annual dinner will be at the Pershing Square Savarin as usual and the date has been fixed as Wednesday evening, May 6th. This is the great happy party to which we all look forward every year, when the medals, pennants and trophies are presented to the winners and speeches are many but short. We stop for just a moment in retrospect and then set out with strengthened ideals and new plans for the future, that the spirit of Fellowship may for ever dwell among us.

N. T. Valentine, *Secretary.*

PERSONALS

ELLIS J. POTTER has been taken into the firm of James R. and Edward J. Law, Architects, First Central Bldg., Madison, Wisconsin.

BEN H. BYRNES has opened an office for the practice of architecture at 312 National Bank of America Bldg., Salina, Kansas.

SANDFORD SMITH AND EVERETT, ARCHITECTS, have removed their offices to 25 Melinda St., Toronto.

JAMES J. MARLEY has opened an office for the practice of architecture at 5 N. La Salle St., Chicago, Ill.

LOUIS LEVINE has opened an office for the practice of architecture at Room 618, First National Bank Bldg., 22 West First St., Mt. Vernon, New York.

WHINSTON AND HURWITZ have dissolved their partnership. Mr. H. B. Whinston will open offices at 6 East 46th Street, New York City.

PERCY C. BOODY, M.S.A., AND JOHN A. DEMPSTER, A.R.I.B.A., have moved their office to 19 Palace Street, Westminster, S. W. I., where they will continue in the practice of architecture and surveying.



R. A. CURRY

R. A. CURRY, Architect, opened his offices in Shanghai, China, in 1917. Mr. Curry received his Architectural Degree from Cornell University and established himself in Cleveland, where he has erected municipal and public buildings and prominent estates. One of Mr. Curry's most notable achievements is the recently completed American Club Building in Shanghai.

A LETTER FROM HAROLD H. DAVIS, EAST HAVEN, CONN.

ON THE bottom of your statement blanks I note that you ask for an indication of profession, and I am at a loss to really know which classification I come under. For the above reason I am writing this letter to ask if a discussion can be brought about, using your magazine as a medium, as to just where an architect begins and a draftsman leaves off.

This subject is especially pertinent in my case as I have recently joined a newly formed civic luncheon club, such as is found in all cities of any size, and the matter of classification came up. As only one from each profession, trade, industry, etc., is eligible to membership, this subject of classification received careful study.

I am employed by a reputable architect, have a degree in architecture from a leading architectural school, am a member of the American Institute of Architects and feel that I am justified in calling myself an architect. Yet the laymen, and I dare say most men in the profession, look upon men in a like position to my own as draftsmen alone and not architects.

I am fully aware of the fact that all eminent architects are draftsmen even after they have "arrived" so to speak, and it is not that we should discard the title of draftsman, but rather that trained men should lay claim to both titles.

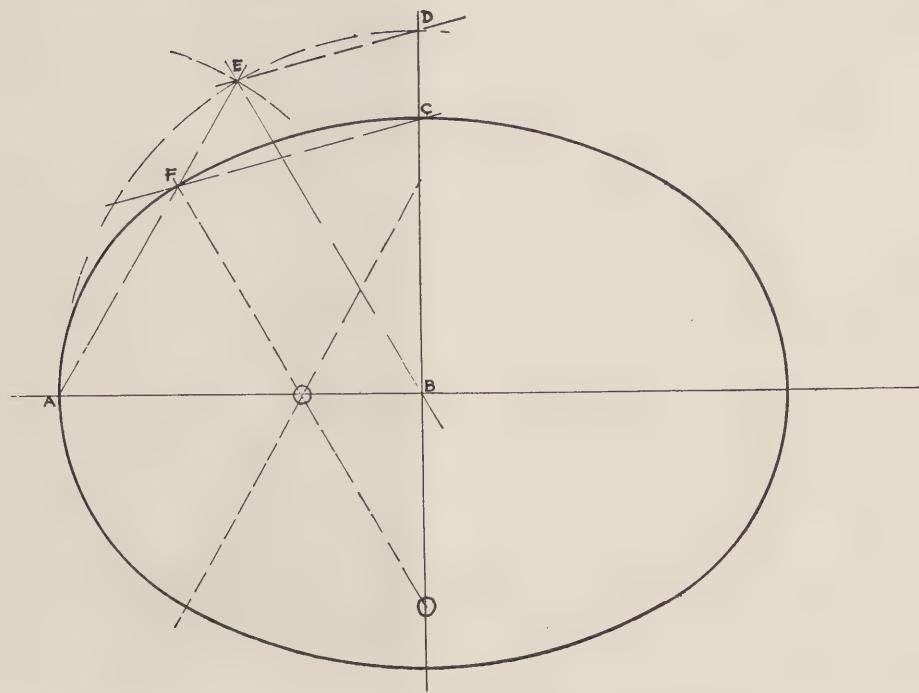
I think you will agree with me in the statement that at present the "architect" is the man who has his shingle out and is conducting his own office, and all men under him, or employed by him, are draftsmen.

If you feel that this is a subject which would bear discussion in your columns, as an enthusiastic "PENCIL POINTER," I would greatly appreciate it.

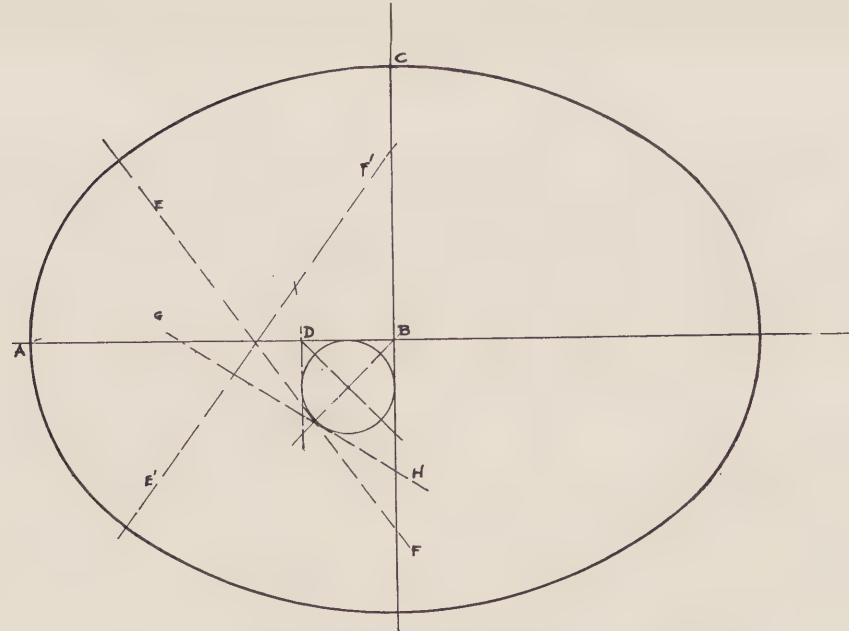
COMPETITION FOR THE PRINCETON ARCHITECTURAL PRIZES.

Two competitive prizes of \$800 each are to be awarded in the School of Architecture for the year 1925-1926 to be known as The Princeton Architectural Prizes. Candidates must file an application with the Director of the School of Architecture before April 25th, 1925. Full information about the competition and application blanks may be obtained by addressing the *Secretary of the School of Architecture, Princeton University, Princeton, N. J.*

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Given A,B,C.
With B as center BA radius, swing arc to D
" A " " " " " E Draw DE,AE,EB
From C a // to DE gives F
" F " " FB = the focus



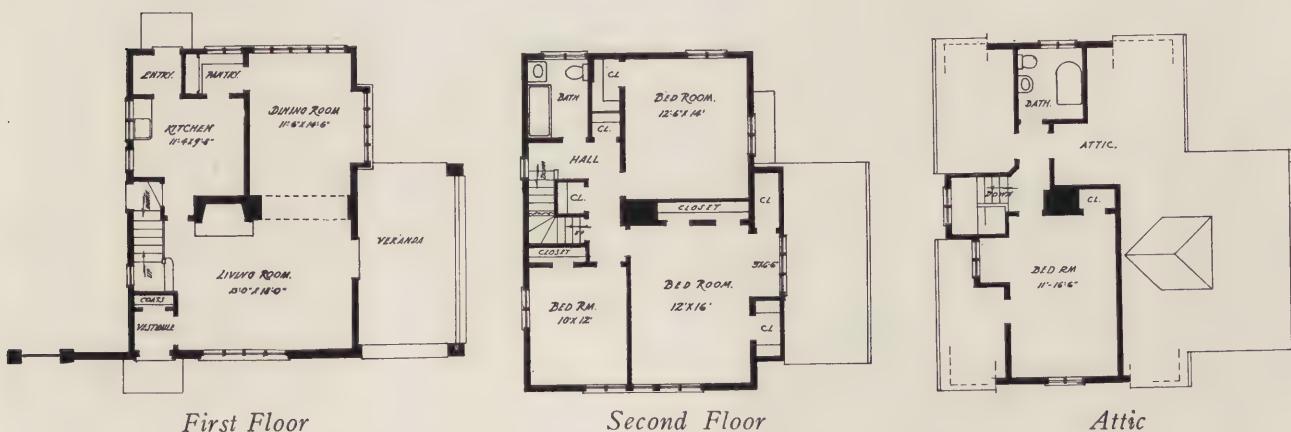
Given A,B,C
Take AD = BC On DB erect a square & draw a circle
within it tangent to the 4 sides. Tangents to this circle which
intersect the axis lines will give the locii at the points of inter-
section. Such tangents are EF, EF'

Two methods for finding an ellipse quickly, by Henry Oothout Milliken. The method of the circle is good because the tangent can be shifted around to make the ellipse either very pointed on the ends or very blunt.

PENCIL POINTS



Rendering by Harry C. Starr.



House at Port Washington, Long Island. Harry C. Starr, Architect, New York.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

IF you are located within a hundred miles of New York be sure to take in the Exposition at the Grand Central Palace, April 20th to May 2nd, inclusive. Take the wife or your best girl, or both. If you are located at a greater distance why not plan a little trip to New York with the Exposition as your main objective? Many PENCIL POINTERS from all parts of the United States have already planned to do this.

It doesn't seem to be possible to keep R. B. Wills from winning prizes around here. Almost every time he sends in a cartoon we have to hand it to him, which is by way of saying that his contribution in the March number entitled "The Competition Drawing" is again the winner.

IN the May issue we celebrate our 5th birthday. Candy and flowers will be accepted. Also poems, cartoons, sketches or other contributions laden with the birthday spirit.

The Milwaukee Architectural Club is a wide-awake and discriminating organization. They have selected D'Esposy's "Fragments d'Architecture Antique" to give as the prize for their local design competition. ADV.

H. VAN BUREN MAGONIGLE, architect, New York City, recently broadcast a short but extremely interesting talk on architecture through Station WEAF. This was done under the auspices of the American Federation of Arts which has arranged for seventeen weekly talks over the radio covering a wide variety of subjects. Mr. Magonigle reports that he has received several letters, besides numerous telephone calls, expressing appreciation, from which he has received the impression that talks on architecture interest the radio audience. Let PENCIL POINTERS in various parts of the country think this over. Similar talks from other stations might be arranged in such a manner as to bring about on the part of the general public a wider and better appreciation of architecture, with which naturally follows a better appreciation of the importance of the architects' services.



Rendering by B. G. Greengard, Chicago.

J. C. BYRD of New York City informs us that no less an authority than the vital statistics section of the Department of Commerce has ascertained that coal miners have the most children of any group in our midst and that architects have the least. This certainly puts it up to this department and frankly we don't know what to do about it. We are merely passing along to our readers the situation as it is submitted to us.

MR AND MRS. CHARLES TINNEY, Sayre, Pa., announce the arrival of a junior draftsman, Richard Charles, weight 9 pounds.

HARD competition at Belmont Hills. Pencil Pointer C. A. McGrew sent us a little clipping (letter and clipping appended) indicating some competition and a unique way of handling it. Why wouldn't it be better to invite all of the warring factions at one time instead of in four shifts? We shall await with interest a further account of the proceedings.

"Apropos of the discussion on 'Selling' Architecture, which has elicited a number of letters, how's the appended clipping for enterprise? I ran across the item in an Eastern Ohio paper, and thought it worthy of your notice, —or should it have been sent to R. W. R., the conductor of 'Here and There and This and That'?

"PENCIL POINTS is a much appreciated visitor at my home. May its shadow never grow less."

MEETING WITH ARCHITECTS

The directors of the Belmont Hills Country club say recent meetings of the board of directors were called to meet with architects now figuring on the proposed new club house for the organization. Eight architects are bidding on the work and the board is meeting with two of these each evening.

BALTIMORE DOES SOMETHING

THERE has appeared in the Baltimore Evening Sun a letter to the editor signed "A Baltimorean" which is reprinted below. We have endeavored to ascertain the name of the public spirited group behind this movement but Hamilton Owens, editor of the Sun, tells us that the gentleman in question and his friends have placed him under a pledge of secrecy. We have two observations to make, first, that what is being done in Baltimore should be done in every city and town in the country. The Fifth Avenue Association of New York City is doing the same thing as applied to Fifth Avenue. Is anything of the same kind being done or contemplated elsewhere? Our second thought is that the men behind this movement should be not only willing but proud to have their names associated with it. Let us know who in Baltimore has sufficient public spirit to take this most commendable action.

To the Editor of The Evening Sun:

Sir—The undersigned, with his friends, proposes to offer annually a gold medal to that citizen of Baltimore who, during the calendar year, puts up the most pleasing building or group of buildings in the city. This medal is not offered to architects or to builders, but to owners. There are no conditions regarding the character of the building erected. It may be a church or a garage, a dwelling house or a factory. It may cost much or little. The one aim is to pay a small tribute to the man (or organization) who does most during the year to make Baltimore a more beautiful city. The award will be made by the donors, but they will be glad to receive suggestions during the year through The Evening Sun. The prize winner for the preceding year will be announced annually in January.

A Baltimorean.

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Pencil Drawing by W. K. Aykroyd, Toronto.

Poetry has been scarce around here lately but here comes Brother Sarben to the front and center just in time to catch the press:

MEDIUMS

By N. A. K. SARBEN

Stretched upon the board
Lay the paper white
Lines its surface scored,
Oblique lines and right.

The elevation rose,
As most of them do,
Out of all repose
To cut the roof in two.

Now as to its scale:
Across the board it swept
Quarter inch most real;
Mansion size is kept.

Half timber'd up above,
Red baked brick below,
A house, not for love,
Planned it was for show.

"Render it a bit.
Here, I'll show you how.
This will make a hit—
'Chinese' mortar, wow!"

That was long ago.
Now he sings this tune:
"If this takes so long
'Rest will take 'till June."

Still he does not see
Just the reason why
Time appears the fee
That wrong mediums ply.

Outline with a point
Of a pencil good,
Detail, plan, and joint,
Or a shadowed hood.

Less time gets away
When the charcoal sweeps
Over planes in gray;
A few points—the sweets!

Washes? Not so slow
On the larger plane;
Colors, all aglow,
Make it entertain.

Fragments, freely made,
'Round a corner, lined
Show a color scheme
Of a diff'rent kind.

Tommy Sawyer knew
The speeding of a job:
Whitewash made it new,
Changed hands gave it bob.

Bagg & Newkirk, architects, 255 Genesee St., Utica, N. Y., wish to purchase a copy of the White Pine Series, Vol. 4 No. 4.

N. T. Valentine, care of Starrett & Van Vleck, 8 West 40th St., New York, wants copies of PENCIL POINTS for February, March and November, 1921 and April 1922.

Wm. A. Giesen, 603 E. Tremont Ave., N. Y. desires to purchase a copy of the Double White Pine number reprinted under the title "Sixty Houses."

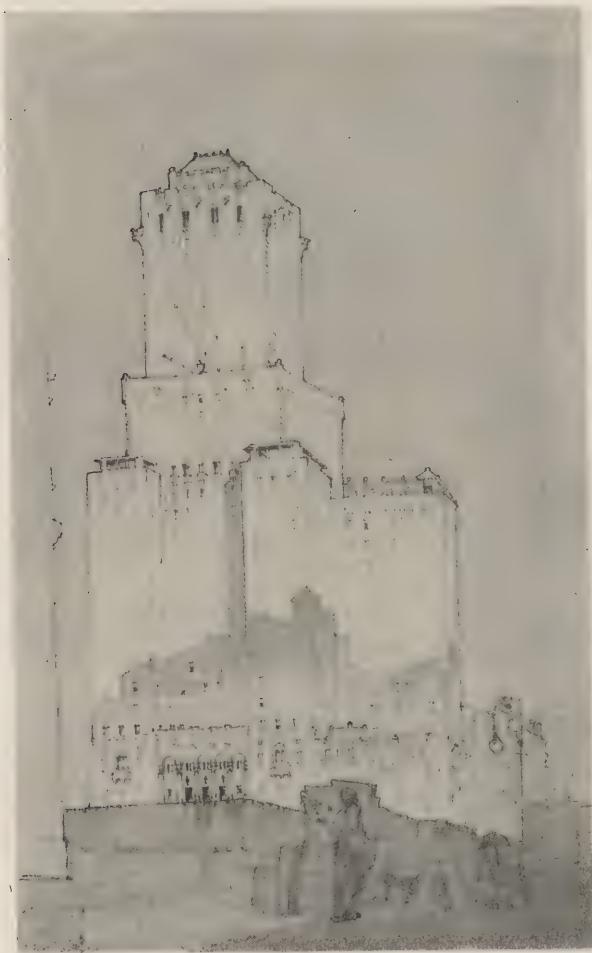
H. F. Heckler, Jr., 45 Green St., Lansdale, Pa., has copies from May, 1921 to the current issue which he is willing to sell.

Don't forget to come to the ARCHITECTURAL EXPOSITION! We will be at Booth 363, glad to greet all comers.



Pencil Sketch by Isador Shank, St. Louis, Mo.

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By Elisabeth Coit, New York.



Y11.
By W. L. Swinnerton, Liverpool, England.



By Elizabeth Kimball Nedved, Chicago, Ill.



By Elisabeth Coit, New York.

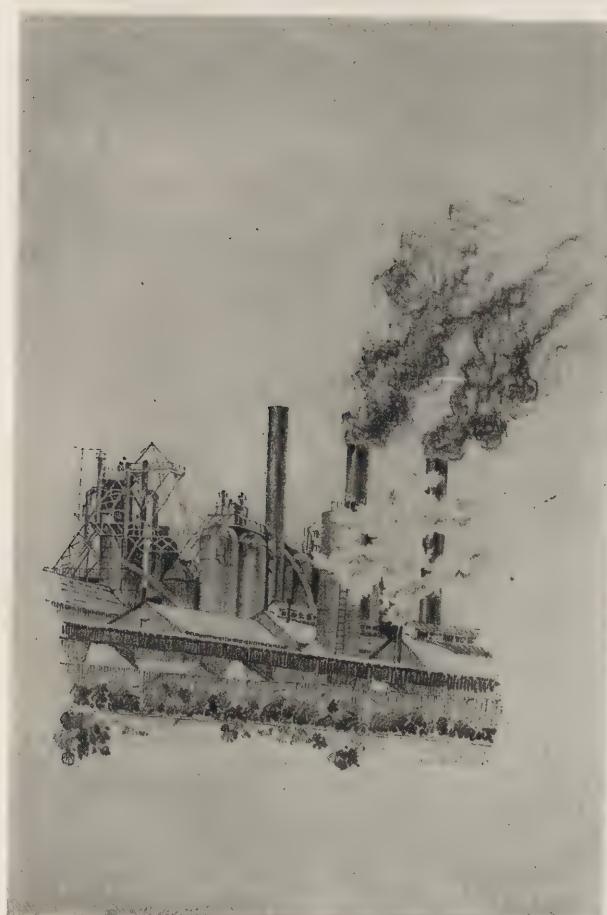
PENCIL POINTS



By W. H. Schilling, New Haven, Conn.



By W. L. Swinnerton, Liverpool, England.



By Paul H. Smith, Chicago, Ill.



By Theodore Kautzky, New York.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART V., Continued

THE MAKE-UP OF A SPECIFICATION.

ONE should not, of course, adopt this form of specification composition unless prepared to pursue it logically through all divisions. In some of these in which an article is purchased complete and merely delivered in the building—no installation labor required—it is best to combine the sections of "Materials and Workmanship" under one heading. Otherwise the sub-division into sections of "General Description," "Materials" and "Workmanship" should be consistently adhered to.

Inasmuch as nearly every topic is alluded to under each of these sections, it is quite important that each specification be preceded by a well-prepared index giving each of the three references together with fair cross-referencing. Those whose duties compel them to search through such documents should be afforded every possible assistance, by all means including such index.

One of the chief advantages of the form of specification which we are describing lies in the fact that the article devoted to "General Description" forms a very handy "reminder" for the whole division. One's accidental omissions will be rare if he keeps these articles carefully checked and accurately fitted to the job in hand.

The two ensuing sections, forming the actual specifications are then simply amplifications of the "descriptions" and are the parts that can be made practically constant in any office.

An example of how a subject is treated in these three sections will adequately illustrate the whole scheme. Thus we have, under Article 2, in Division of Carpentry, the following:

"(J) BRONZE THRESHOLDS shall be provided in all outside doorways and in all inside doorways where change of floor surface material occurs."

In the next section, under "Materials," we find:

"(J) THRESHOLDS shall be of $\frac{1}{4}$ " cast bronze for exterior openings and $\frac{1}{8}$ " drawn or extruded bronze for interior openings, all of standard commercial quality, smoothly polished natural finish and with approved non-slip tread."

And then, under "Workmanship."

ART. 19. THRESHOLDS.

"(A) SIZES. For outside doors, thresholds shall be $4\frac{1}{2}$ " wide by $\frac{1}{2}$ " high, unless otherwise shown or specified. Those for inside doors shall be $2\frac{1}{2}$ " wide by $\frac{3}{8}$ " high. Each threshold shall be full length of width of opening between rabbets."

"(B) FABRICATION. Each threshold shall be smoothly cut to exact fit as measured at building and shall have reamed holes to fit c.s. screws. For doors with floor-hinge plates, thresholds shall be 3" wider than width of such plates and shall have holes cut and neatly rabbeted to exactly fit same to a smooth milled joint. Under double doors, hole shall be cut to fit foot-bolt. Edges of all thresholds shall be beveled as detailed."

"(C) PLACING. Each threshold shall be secured by 2", No. 10 c.s. bronze screws, not over 15" o.c. nor over 3" from ends; either driven into wood floor or into special anchor blocks embedded in concrete as case may be."

PART VI.

SPECIFYING PROPRIETARY ITEMS.

The question of how best to describe an article of special make which an architect wishes to incorporate in his structure is oftentimes embarrassing, especially if the building is a public one and critics are ready to hand, offering competitive products.

There are few items entering into construction or building equipment which enjoy freedom from competition and few which rank so high above their rivals as to warrant sole consideration.

It is ordinarily assumed that the architect aims, by the naming of a specific material, to thereby indicate a standard

for such item, rather than to direct the contractor to purchase from a favored maker.

The contractor's privilege to deal with one other than the one specifically mentioned is customarily set forth in some such general paragraphs as these:

"ITEMS OF SPECIAL MAKE. Whenever an article or class of material is specified by trade name or the name of a particular maker or by catalog reference, such mention is intended to mean either the article so described or any similar item which, in the judgment of the Architect, is equal thereto in every respect."

"SUBSTITUTIONS of items, as mentioned in the foregoing paragraph, may only be made after a written order from the Architect has been obtained well in advance of the time when such items will be needed in the work. In no case will an article other than is specified be considered, if brought on the work without previous authority."

This is practically an invitation to salesmen to step forward and annoy the architect by the presentation of everything remotely resembling the thing in question.

To be sure, it is the duty of the architect to his clientele to make himself familiar with every conceivable material or contraption that could possibly enter into the construction of a building, from tap-screws to turbines, fish-traps to pipe-organs.

So must one stop, look and listen and be able to judge between real excellence and sales-patter; though there be some among us who take the stand that an architect should first select exactly what he wants, specify just that and permit no substitution.

Well and good—if the article has no real equal and if the architect would rather take a chance of missing something worth while than to be bothered by the enterprising propagandist.

Much of such "annoyance" can, of course, be done away with by insisting that substitutions shall only be suggested by the contractor himself, thus requiring all salesmen to first "sell" that party. The effect of this may be to disclose the fact that the article specified, though perchance the best in the field, has nevertheless several competitors, the vendors of some of which are willing to accept a lower price for their commodity.

To meet this possibility, especially if one is working to an economical program, it is well to add this clause to the paragraphs above quoted:

"The Contractor may also submit for consideration, or may be invited to submit, items similar to those specified but of different value. If such substitution be approved by the Architect, the amount to be added or deducted for same will be agreed upon and an order issued as provided in Art. X."

Too much of this sort of thing would entail a heavy burden upon the architect. He can anticipate some of it by asking for alternative figures on certain more important items when bids are taken, but contractors are inclined to frown down such practice and it is well to curb one's curiosity along that line if their good will is to be considered.

While it is also a pretty safe rule to avoid all possible extras and deductions after a contract has been signed, yet it is not particularly dangerous to permit a salesman to persuade a contractor to name a price deduction for permitting a substitution. Obviously the eager representative will exert every effort to make such figure sufficiently attractive.

On the other hand, it is not impossible to imagine a case wherein the concern whose goods have been named has boosted its price after learning that the contractor was compelled to buy from it. For this reason, the architect should always have on file a quotation on such items as are exclusively specified, in order to prevent any such injustice to either owner or contractor.

It seems fairer, on the face of it, to mention two or more makes of an article, yet, by so doing, one is very apt to be found discriminating in favor of the cheapest and poorest of those so named. Hence nothing is gained and good can be sacrificed by giving more than one name, unless the products in question are presumably equal, conforming to

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certain fixed standards and subject to the same prices and discounts. This might be considered true of such goods as cement, paint, varnish, etc.

Such things as hardware, lighting fixtures and plumbing goods are manifestly easier to specify by catalog number than in any other way. If this is done, one should insist upon receiving a schedule of goods intended to be furnished well in advance of the time when such goods will be needed so that he can compare catalog numbers, if the contractor proposes to substitute.

Many contractors prefer to follow the letter of a specification rather than to bother themselves and annoy the architect by suggesting substitutions. For this reason, manufacturers learn to value the advertising they derive from specification mention and are even willing to pay for it, if given the opportunity.

Naturally, no ethical architect enjoys having even the suggestion of such impropriety imputed to him. Nevertheless, it is astonishing how easily the public may be led to believe such slander, simply because there are some shysters in every profession.

It is not so long since it was common practice for architects to use specification covers which bore the ads of local contractors and building material concerns. Investigation disclosed the rottenness of the method whereby this graft was carried on. A single example may be cited as typical:

A solicitor, generally an itinerant, called on the architects of a city and persuaded as many as possible to agree to make use of a given supply (say a year's) of specification covers which were to be furnished him gratis—or perhaps it was oil-cloth blue-print covers.

Armed with such consent, oral or written or, maybe, only tacit, the aggressive stranger went after the ads and he was a real hustler. The four pages of the specification cover were divided according to the fertility of the field to be harvested and the ability of the salesman. A good one could sell twelve spaces on each of the second, third and back pages at five dollars and eight on the title page at ten dollars, a total of \$260.00 in two days, have the printer going meanwhile, and the work completed and delivered on the third day, cleaning up \$50 to \$75 a day; more, if he could get two or more architects to use the covers and thus double or treble his rates.

He could sell his ads about as fast as he could see his prospects, by the simple process of declaring that the architect had sent him and creating the impression that they were partners in the deal.

The advertiser who was being shown the absurdity of believing the possibility of any such "split," replied that it was still more absurd to suppose an architect to be such a damn fool as to put out such advertising and allow someone else to reap all the cash benefit. It was pointed out that the architect thought he was being a good fellow by distributing such advertising, which brought a characteristic response, "H—, I don't consider such advertising worth a continental. I only paid the fellow the ten bucks because I thought I was doing the architect a favor."

Thus ended the advertising specification cover in that town.

Once again, we see that it's all in the point of view. It is one thing to be a high-minded professional practitioner and quite another to make the average hard-headed business man appreciate it.

But, while it is not impossible to write a specification without mentioning names, it is much more simple to insert the names, in many cases.

For hardware and lighting fixtures, if catalog articles are desired, one can avoid specifying a particular make by simply requiring the contractor to allow a lump sum for each and similar commodities. Such sum can, in the case of lighting fixtures, be made to include items of special design, if so desired.

This is not so convenient for plumbing fixtures because of the fact that each plumber favors a particular maker, hence one is practically picking his plumber, if he tries to select fixtures himself under a priced allowance—added to which difficulty is that of trying to ascertain what such goods actually cost the contractor. It is just as well not to try to find out.

One must familiarize himself with the various catalogs and specify accordingly, using certain numbers as standards. An amusing subterfuge, practiced by certain "sanitary engineers," is to substitute a catalog description of the article, without naming the catalog from which such description was copied. This sounds quite erudite and may

fool the owner into thinking that the engineer is deeply versed in his subject. As a matter of fact it may tie a bidder closer to a single make than if a plate number were frankly given and approved substitutes permitted. And it is liable to prove a nuisance to the superintendent inspecting the work.

Only on a multiplicity of large work, such as federal jobs, railway structures and the school buildings of a large city, does it pay to attempt to depart from the catalog goods, such as hardware, plumbing fixtures and the like, unless the client is prepared to pay well for special stuff.

Hence the subjects is resolved into its simplest form by pursuing the policy of using makers' names and catalog numbers as sparingly as possible and only for the purpose of indicating a standard, permitting, if feasible, the substitution of items approved as equal by the architect.

CASEMENT AND STORM SASH VENTILATION

By OTTO GAERTNER

THERE are many times when the architect would like to specify casement sash and storm sash but the client objects on the ground that they are not practical. The client complains that the casements and storm sash do not permit ample regulation for ventilation. With casement windows, of course, the window can be opened to its full opening or the sash may be opened only a small distance, depending upon the type of hardware which is used as the sash adjuster. The friction adjuster will permit the sash to stand at any angle while the others will permit the sash to open as a minimum to the first notch. But during cold or stormy weather this may be too much ventilation and since it opens the window from the top to the bottom it may permit snow or rain to enter, especially down near the sill where the projection of the head beyond the sash will not be sufficient to guard against it.

Then comes the storm sash problem. Storm sash are a great help in that they form an air space between themselves and the permanent sash. This air space acts as an insulator so that much heat loss by radiation through the glass is saved and also direct drafts around and between the edges of the sash are eliminated. Also there will be less of the usual condensation on the inside of the window glass to obscure the view and to drip on the window stool inside. In the case of the storm sash the question arises as to the type and thickness of the sash. Conditions vary in different houses. The storm sash should be placed on the outside. If the permanent windows are double hung, the sash may sit on the rabbet formed by the outside casting, or blind stop, and the outside lining of the window box. This would be the same rabbet generally provided for the screens. If there are shutters or blinds an additional rabbet should be provided, otherwise it would be impossible to close the blinds when the screens or storm sash are in place.

On account of the small width of rabbet generally allowed, the storm sash are generally made rather thin, namely, one and one-eighth inches, whereas one and three-eighths inches or more is better. With double hung windows the storm sash are generally hung at the top and made to swing out at the bottom. In this way they may be readily opened to any angle which the hardware will permit but the tendency is sometimes to open them too far so that if they are only hooked in place at the top and a strong wind gets underneath them they may be lifted from the hooks. In exposed locations this may be prevented by using regular hinges at the top and securing them well at the bottom. If they are hooked in place at the top the most convenient way is to use the same hooks provided for the flyscreens if that type of screen is used.

Storm sashes for double hung windows should, for appearance, be made to conform to the lines of the permanent window. The top rail and the stiles may be specified two and one-half inches wide and the bottom rail three and one-half inches. The muntins should be specified to match those of the window, and a one and one-half inch wide rail or a muntin may be specified opposite the meeting rails of the window. Of course, all outside hardware should be specified as bronze or brass if the cost permits, otherwise it should be heavily sheradized for painting. Butts should then be provided with brass pins.

The storm sash for casements should be made to conform to the windows and should be hinged to swing out. If the

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permanent sash also swing out, the permanent sash must be specified with a pane of glass to open so that the outside sash may be opened by hand before the inner ones can be opened. The other alternative is to use special hardware so that the outside sash may be operated from the inside but this is not always a convenient thing to do with temporary sash. If the permanent sash swing in, the storm sash may be applied the same as for double hung windows. If the storm sash are hinged the same size and number of hinges should be used as for the fly screens. They should be loose pin butts so placed that when the pins are drawn from the butts on the screens, the screens may be removed with one half of the hinge, but the other half should remain. A half butt on the storm sash conforming to the half on the screen will then fit into the half which remained so that it will not be necessary to unscrew the hinges and enlarge the screw holes until they no longer hold. This same procedure should be followed with storm doors. If the storm sash are not of the same thickness as the screens, some adjustment of the hinges on the one or the other may be necessary, or the holes in the hinges may have to be specified to be drilled so that the screws can get the proper hold in both the screens and the sash. With hinged storm sash the ventilating problem is the same as with the casement sash and in severe weather there may be too much if the sash is open from top to bottom especially if the sash extends to the floor.

For this reason ventilators are sometimes provided direct in the sash, either as a pane of glass to open, a ventilator provided in the glass, or an opening in the bottom rail of the sash. The last kind is the simplest. It means that an opening of any desired height and length is provided in the bottom rail of the sash after the width of the rail has been made large enough to receive it without being weakened. A hinged or sliding sheet metal cover should be provided so that the opening may be closed. There are some ventilators on the market which may be set into such an opening. Various sizes are carried in stock, the smallest of which is perhaps one and one-half or two inches by twelve inches long. It consists of a frame with louvres having a small overhanging hood on the outside to keep off the rain and a deflector on the inside to deflect the air upward. The hood and deflector project beyond the face of the sash. This is satisfactory for permanent sash but they should be omitted from storm sash so that they will not be damaged when the sash are handled or stacked up for the summer. Sometimes the louvres are covered with fly screen wire. The wire will keep out insects if the ventilator occurs in the permanent sash and it will help to keep out snow if placed on the storm sash and if made of a close mesh. When detailing the sash the opening must be placed so that any projections of the ventilator will occur above the woodsill if the sill does not project enough for the sash to rest on it.

The kind of ventilator that is set directly on the glass is not well thought of for residence work. It is more unsightly than the others, is more difficult to apply and is not so easily controlled. The writer has used two kinds of ventilators, made by opening a pane of glass, successfully. The one occurred in permanent casement sash that were one and three-quarters of an inch thick but the detail can readily be modified to suit any thickness of sash. The usual muntin section was used and the pane of glass that was to open was replaced by one set in a small metal frame to open out. The frame may be made of brass or copper about thirteen thirty-seconds of an inch thick. It may be an angle in section with one leg as deep as, or slightly deeper than the depth of the glass rabbet and the other as wide or a trifle less in width than the width of the glass rabbet. The glass is set into this metal angle frame, back puttied, and held in place with a very small metal stop tap screwed to the frame. If the frame is wide enough the glass may be held in place with glazing clips and putty as is customary with metal sash, the proper glazing putty being specified. If additional rigidity is needed the section of the frame may be made a "Z" section with an additional leg of any width extending on the inside and overlapping the first member of the muntin, but in either case a short piece of "Z" section with a hook on the inside and end must be provided at the center of the height of the frame to provide a method of fastening the frame closed by means of a small metal pin going through a hole in the inside leg and into a corresponding hole in the side of the muntin.

The peg should be fastened to the muntin or frame by means of a small chain to prevent its being lost. The hook should be similar to the hook on one end of a picture

hook, just large enough to be taken hold of by one finger. The frame should be hinged by two small hinges or preferably by a continuous piano hinge which is stronger and makes for a tighter and stronger installation. The hinge must be fastened through the outside member of the muntin in such a way as not to mar the outside appearance. Very small nuts and screws may be used, the screw heads being counter sunk in the hinge, and the nuts being covered by the putty of the adjacent pane of glass. Wood screws may be used if the hinged side of the ventilator is at a stile of the sash. A small casement adjuster or quadrant should also be provided to hold the pane open at any angle. All metal in connection with this should be non-corroding and modifications in hardware or construction may be made to suit the labor and material that is available.

(To Be Continued)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing the publication. When writing for any of these items please mention PENCIL POINTS.

Horse Head Zinc Specifications.—AIA File No. 121. This document, just off the press, contains the essential information required in considering and specifying Eaves, Troughs, Gutters and Conductor Pipes. 12 full page detail drawings are included showing application of the material for a wide variety of uses. Complete specifications accompany the drawings together with tables of standard sizes, specifications for painting, soldering, etc. 40 pp. 8½ x 11, in heavy folder. New Jersey Zinc Co., 160 Front Street, New York. Applications for this document should be made on a business letterhead.

Chimney Pots.—Brochure with detail drawings and color plates showing a wide variety of chimney pots of Atlantic Terra Cotta with notes and drawings on fire-place construction, etc. 16 pp. 8½ x 11. Atlantic Terra Cotta Co., 350 Madison Avenue, New York.

Historic Homes of America.—Brochure in sepia illustrating 12 old Colonial houses located in New England and on Long Island. Interesting examples of early American domestic architecture. 8½ x 11. Red Cedar Shingle Bureau, 38 South Dearborn St., Chicago, Ill.

Bathroom Accessories, AIA File No. 231.—Handsome and useful document setting forth for the architect and specification writer complete line of accessories for the modern bathroom, together with color plates showing different treatments of wall surfaces; layouts, detail drawings to scale, instructions for installing fixtures and complete specifications. 36 pp. 8½ x 11. The Fairfacts Co., 234 West 14th St., New York.

From Forest to Floor.—Portfolio with eight full page color plates, drawings showing designs for parquetry flooring, complete information on oak, maple, walnut and other rare woods. Notes on special designs, etc. 8½ x 11, in heavy filing binder. Indiana Flooring Co., 234 Rider Ave., New York.

Drafting-Room Standards.—A series of twelve full page plates drawn to scale covering roof drains, shower room details, swimming pool construction, drinking fountain details, roof overflow, etc. A valuable addition to the working library. Josam Mfg. Co., 4910 Euclid Ave., Cleveland, Ohio.

Folding and Portable Assembly Chairs.—Illustrated brochure showing this line of equipment completely. 32 pp. 6 x 9. American Seating Co., 14 East Jackson Blvd., Chicago, Ill.

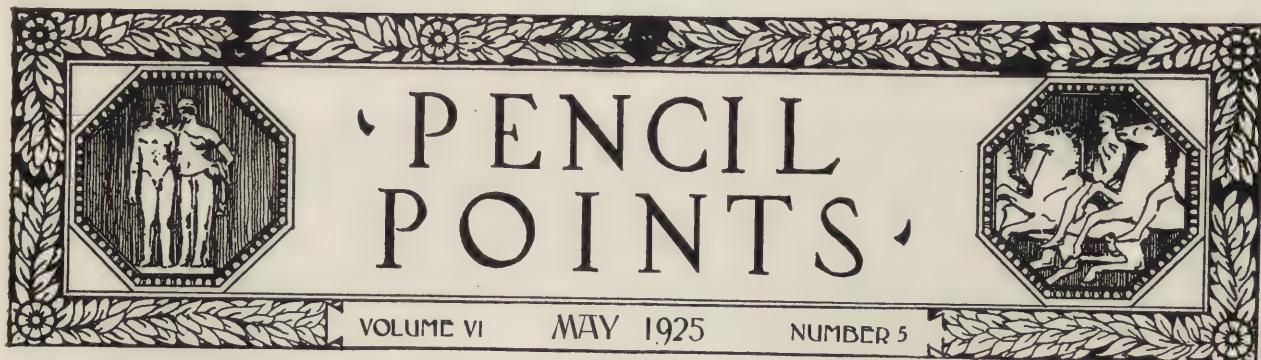
Published by the same firm, *Assembly Chairs and Combination Seating, companion to the above*. Covers types of seating suitable for use in a wide variety of auditoriums, assembly rooms, etc. Also, *Tablet Arm Chairs*, covering seating with arm for writing, suitable for schools, lecture halls, etc.

Greenhouses of Quality.—Attractive brochure illustrating special types of greenhouses suitable for the large and small estate. Large detail sheet showing construction, layouts, etc. W. H. Lutton Co., 222 Kearny Ave., Jersey City, N. J.

Details and Data Sheet No. 10 AIA Classification No. 8B2.—Detail sheets with folder showing two large cornices for steel frame construction. One is Greek Doric and the other Italian Renaissance. Indiana Lime-stone Quarrymen's Association, Box 784, Bedford, Indiana.

The Simplex Manual.—Handbook covering information on insulated wires and cables for all types of building uses. Indexed. 160 pp. Handy pocket size. Simplex Wire and Cable Co., 201 Devonshire St., Boston, Mass.

Door-Ways.—Monthly publication on the subject of modern hardware specialties and their application. Multifold windows, elevator doorways, and garage doorways are treated in the March number. Richards-Wilcox Mfg. Co., Aurora, Ill.



FIVE YEARS

PROFOUND gratitude is the feeling uppermost in our hearts and minds as we reach this, our Fifth Milestone. We are told by many of our kind friends from all parts of the country that we have accomplished much since the first copy of *PENCIL POINTS* was issued, five years ago. Such expressions of approval are greatly appreciated, but we feel it only fair to record at this time our obligation to our subscribers who, in constantly increasing numbers, have read our paper and whose criticisms, suggestions and advice have been of the greatest assistance to us in shaping our editorial program. We said five years ago that it was our purpose to publish *PENCIL POINTS* "with" our readers rather than "for" them. We believed then that an architectural publication which is to be vital and stimulating in every sense must draw its inspiration very largely from the practical men who are daily meeting and wrestling with the various problems which present themselves in connection with the production of our modern buildings. These problems have to do with design, rendering, planning, the making of working drawings, the selection of suitable materials and their proper specification, superintendence—in short, all of the problems which are met with in the drafting room.

In so far as we have been able to present material of value to the draftsmen, architects, specification writers and students of architecture who make up the bulk of our subscription list, we have been directed very largely by the wishes of our field as expressed to us by personal contact and by letter; not only from all parts of the United States and Canada, but also from many other parts of the world, notably England, and Scotland, Australia, New Zealand, South Africa, British India and China. It has been a pleasure to us to watch the growing interest of our readers as reflected in the large number of voluntary suggestions and contributions. It is not always possible for us to follow the suggestions made, nor to use all of the contributions offered. It is necessary for us to consider the limitations of our space as well as the particular value of a suggestion or contribution, judged not only from the standpoint of its excellence, but in view of the requirements of our field considered as a whole. We earnestly hope that every reader of *PENCIL POINTS* will feel free at all times to ask questions, to make suggestions, and to offer contributions, realizing that every such communication is welcome, is given the most careful consideration and is used when possible if in our

judgment it contains a new and valuable thought.

The manufacturers who have placed advertisements in this journal for the information of our readers have contributed in no small measure to the growth of *PENCIL POINTS*. The co-operation of these firms has made it possible for us to increase the size of the reading section, thereby conveying monthly to our readers more articles, more illustrations and more news.

Five years pass quickly. We have all been so busy we can hardly realize that this is our Fifth Birthday, but the calendar says it is so. We wish we could shake the hand of every *PENCIL POINTER* and thank him for the part he has played in the development of our enterprise. The next best thing we can do, and we do it here and now, is to thank you.

SPANISH ROMANESQUE ARCHITECTURE.

RECOGNIZING the possibilities of Romanesque Architecture as a source of inspiration to designers of modern office buildings, banks and other structures besides churches, and seeing signs of the beginning of a revival of the use of this style; the publishers of *PENCIL POINTS* some months ago began the preparation of a book of plates of Spanish Romanesque Architecture. This book has just appeared under the title "Masterpieces of Spanish Architecture, Romanesque and Allied Styles." It is made up of one hundred plate pages containing hundreds of details, sections and elevations showing examples of Spanish architecture in the Romanesque and the closely related styles which we usually class under the general term of Romanesque.

The plates of this book are excerpts from the ponderous work published by the Spanish Government for the purpose of making a record of all the fine old examples of architecture in Spain and issued under the title, "Monumentos Arquitectónicos de España." Of the original work seven large volumes of beautifully engraved plates were issued; then the work was discontinued and these volumes are practically unobtainable. The reproduction of these fine hand engravings in the present work was a tour de force in photo-engraving. While the plates showing general views of the buildings have been reduced in reproducing them, a large number of details have been shown at the full size of the original drawings, making it possible to study them satisfactorily. There is helpful introductory text by John V. Van Pelt.



The PENCIL POINTS BOOTH at the Architectural and Allied Arts Exposition at the Grand Central Palace, New York.

In the background is seen a graph showing the growth of the circulation of PENCIL POINTS from the first issue to the present time. This is flanked by sketches drawn in gouache and pastel.

LOOKING BACKWARD—AND FORWARD

STATISTICS usually make pretty dry reading; so what figures we feel it necessary to present in recording the progress of PENCIL POINTS come right here at the beginning where we can have them quickly behind us. When we published our first issue, we had 3,221 subscribers. At the end of the first year, the figure stood 8,575; the third year, at 10,721; fourth year at 11,644; and now it is a little over 13,000. The number of reading pages in the first issue was twelve. The number is now sixty.

Figures alone do not mean everything, but the record given above shows that, to a certain extent at least, we have hit the mark we were shooting at. No periodical has ever achieved 100% of its circulation possibilities, and PENCIL POINTS does not expect to establish a new world's record in this respect; but, and here's where we take a look forward, we do expect to reach a circulation of 25,000 before another five-year period has rolled around, and we expect to reach this figure only by increasing the value of the paper to the fields we serve. In our opinion PENCIL POINTS has done no more than make a good beginning towards doing its job as "A Journal for the Drafting Room." Far from being satisfied with what we have done so far, we are realizing more and more every day how very little we have done when we measure our accomplishments by the yardstick of our opportunities.

Let us just dream a little bit. Refinements and development in the production of modern buildings are taking place with greater rapidity today than ever before. Design has changed. Look at the buildings which have been produced in our large cities, notably in New York, as a result of the zoning ordinances. Whether our new buildings, developed under certain conditions, are better or not better than earlier ones may be a matter of opinion, but at least a new note has been struck and its influence is spreading everywhere. New forms are being developed, and new combinations and adaptations of traditional styles are being given a new significance and meaning. A tremendous revolution in design is taking place right before our eyes today and it will go far and fast. At the other end of the scale, judged from the standpoint of the amount of money involved in each operation, stands the small house. Who can deny that here also an extraordinary change is taking place and who would venture the prediction that the next five years will show any diminution in the development of the small house. There is nothing on the horizon to indicate anything but a continued and rapid advance in the design, plan, construction and equipment of this most universally interesting of all types. So with all the range of buildings in between the towering skyscraper and the little cottage or bungalow new problems are daily presenting themselves for solution. The owner requires new elements of service in his building, sometimes dictated by financial considerations, sometimes by considerations of comfort and beauty, and sooner or later these all come to the door of the architect and to the heart of his work-shop, the drafting room. Upon the success with which these problems are

met and dealt with by the architectural profession depends the status of the profession in its relation to our national growth and development.

To serve fully and completely the men who must be depended upon to carry forward the production of our buildings is the aim of this paper. Merely to record what has been done, as we see it, is not enough. We must have a hand in the actual doing, while the doing is being done. If there is a better way of producing a set of working drawings than the way now being generally employed, our readers must know about it. If there is a better way of handling the difficult problem of specifications so as to save time, money and tempers, let such facts be recorded promptly as they occur, for the benefit of all. Let there be discussion on all the vital problems affecting the well-being of the profession. We have in mind such things as the training of the student. What happens to the student after graduation? Does his development continue along the right lines, and with proper encouragement, and how about the conditions under which the draftsman spends so many important years of his life? How about the heavy turnover, with its inevitable economic loss? What is the proper way, all things considered, for the young architect to spread his wings and start in for himself? Should he be encouraged to do jobs on the side, or is this a pernicious practice which should be frowned upon and rooted out, and if so, what is going to be substituted for it? These and many other problems are crowding and jostling and they should be openly and freely discussed, and the proper solutions reached.

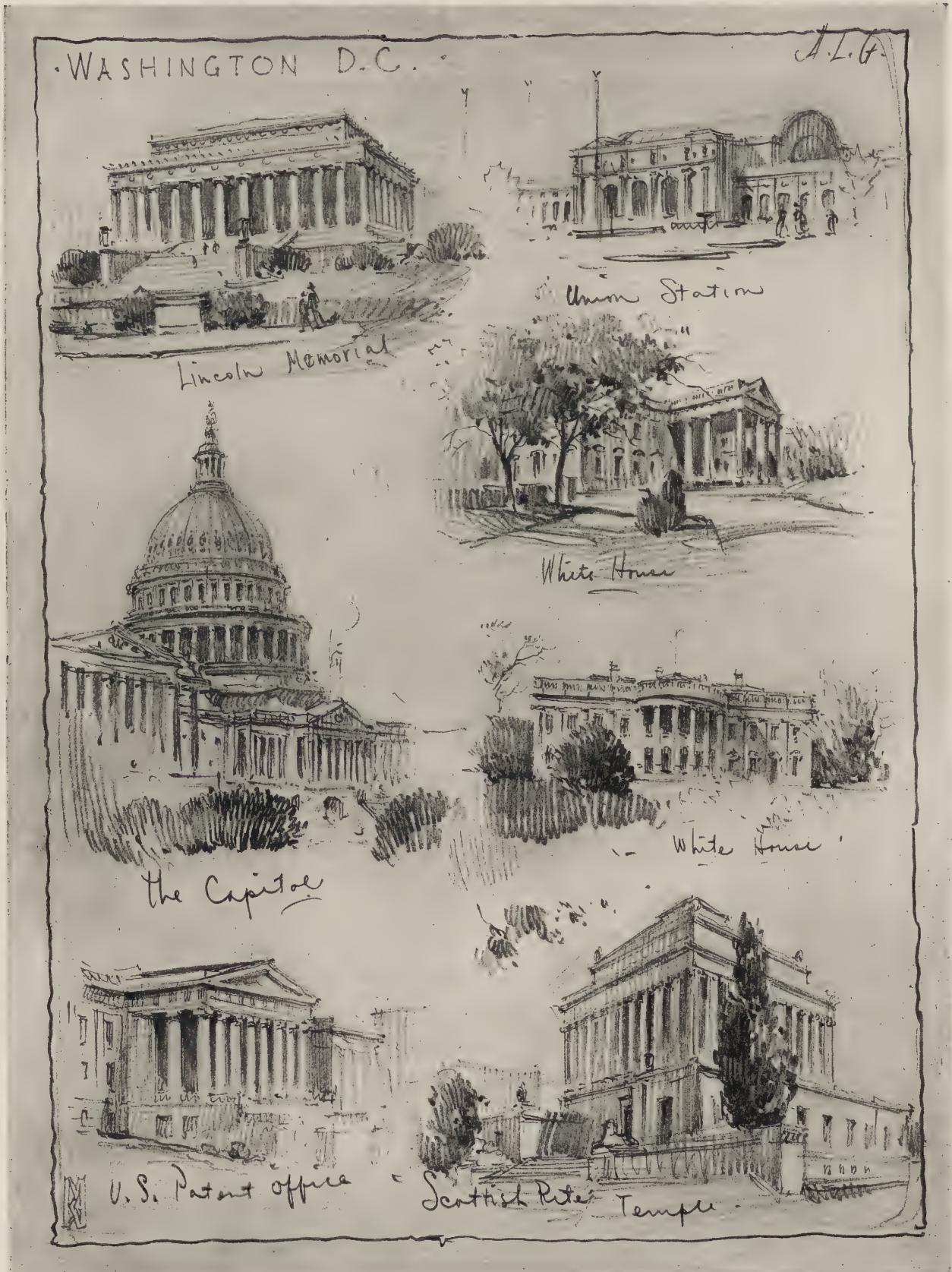
So we say again that our job as we see it has hardly been more than outlined. Details will have to be filled in day after day and year after year.

And now we come to something far different. Let's call it the lighter side, the frosting on the cake. News of the activities of the various architectural clubs, cartoons and sketches, personal experiences and odd and interesting bits of all kinds, we deem to have a proper place in PENCIL POINTS. Our news pages are crowded with offerings and will be expanded. Men everywhere like to know what the men in other cities are doing and talking about and thinking about. An interchange of items, personal or otherwise, serves to bring us all closer together, to know each other better and to understand each other better.

We must in the future, as we have in the past, depend largely upon you men who are daily in the field for our inspiration. You must be at once the source of our inspiration and our most severe critics. We are not sensitive to criticism, in fact we welcome it. Some of the best suggestions we have received have come from letters in the nature of kicks. The most valued readers we have are those who judge our work with a critical eye. Our truest friends are those who take the trouble and time to point out our mistakes.

We see great things ahead of us, and many new opportunities for service. If we all work together for the common good, great things can be accomplished.

PENCIL POINTS



Thumbnail Sketches Made from Photographs of Buildings in Washington, D. C., by Arthur L. Guptill.
This sheet is reproduced at the exact size of the original.

THUMBNAIL SKETCHES

BY ARTHUR L. GUPTILL

MUCH has appeared in these pages from time to time concerning the making of finished drawings and renderings of architecture as well as certain phases of sketching. In this article we purpose to discuss a particular type of sketch which has received scant mention, yet which seems sufficiently important to deserve the consideration of all who are interested in architectural delineation, or for that matter, in architecture itself.

For want of a better name we shall call sketches of this particular class or type "thumbnail sketches." This term, though commonly used, is a somewhat ambiguous one, so it seems advisable to state that it is employed here in a descriptive sense relating to size only. Under this general classification we plan to consider tiny freehand sketches (not necessarily the size of the human thumbnail, but no larger than a couple of inches or so in any dimension) as used for several distinct purposes.

We hope to show some of the advantages to be gained by the draftsman, student of architecture and architect through the making of these diminutive drawings and we also offer hints as to how they may be made and a few words of warning as to some of the pitfalls to be avoided.

As a starting point, let us consider the case of the student of architectural history. He is anxious, of course, to get a sound knowledge of the great architecture of the past. Let us see how thumbnail sketches can serve him, and discuss some of the kinds best suited to his purpose.

Such a person studies from illustrated books on his subject, and as he reads the text he examines the accompanying illustrations. Doubtless he writes notes from the text and perhaps sketches some of the most important buildings from the illustrations as he goes along. If so he cannot fail to find such drawing helpful no matter how he goes about it. All too often, however, if he takes time from his reading to do any drawing at all he gives so much thought to obtaining exact proportion, excellent perspective and refined technique that he fails to acquire what is really most vital, and that is a memorized series of vivid mental pictures or images of the buildings drawn. If asked to put his books and sketches away and draw some recently studied edifice from memory he would probably be surprised at his lack of definite knowledge of its appearance. Let each reader test his own ability in this respect.

In the writer's opinion there is no way in which the student can more easily memorize the vital facts concerning the appearance of any given building than by making several tiny sketches of it as de-

scribed below, with special emphasis on the individual peculiarities of the design.

Let us suppose that the student of history is at the moment studying the Pantheon at Rome. Assuming that he is unable to sketch from the actual building let him select two or three photographs of it, both exterior and interior, and diagrams of the plans and sections. Next let him study and compare these with an analytical mind, reading the descriptive text as he does so. Let him ask himself such questions as the following:—What is the general shape of the building? Is it square or round in plan? Is it high or low? What are its main subdivisions? What kind and shape of roof has it? Are the wall openings many or few in number and what of their size? What classical orders appear in the composition? Are arches employed? Is there much ornamental detail?

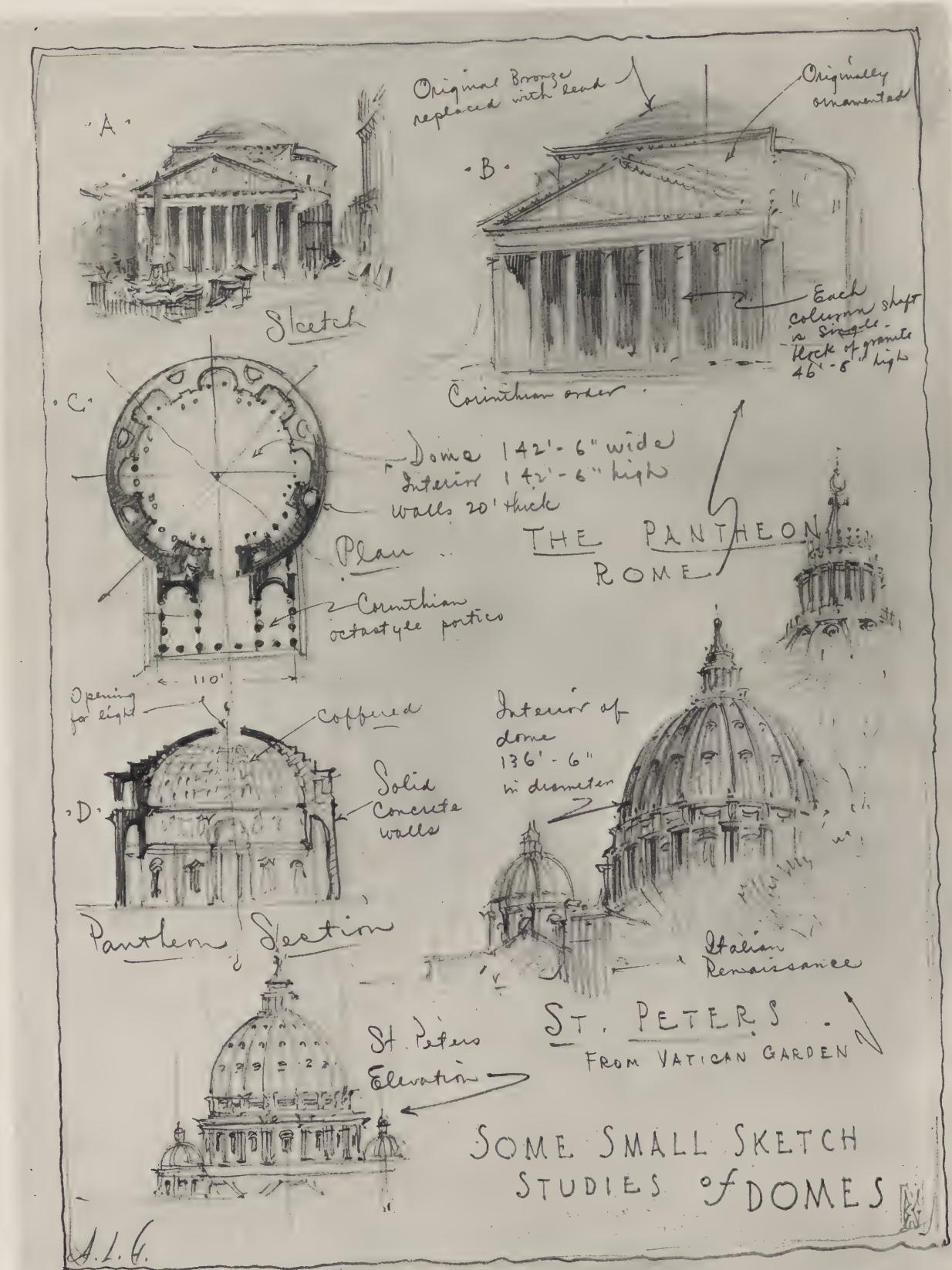
When he has gained a good idea of the building as a whole through this study and analysis he is ready to select a typical photograph of it from which to make his first thumbnail sketches,—the smaller the photograph the better as large ones show too much detail and overemphasize irrelevant accessories.

The next step is to choose his drawing materials. The choice of these is a matter of comparatively small importance, for his primary object, as has been stated above, is not to produce a series of sketches, but is to stow facts into his mind, the putting of these facts on paper being simply a part of the memorizing process. The choice depends wholly on the individual and his purpose, for one should work in the medium and manner which seem most natural to him and should change both as often as he desires. The pencil is undoubtedly the most popular medium, though some prefer the pen. The latter allows no hesitation, makes changes difficult, and permits somewhat less variety in line and tone, but produces a crisp, clean result which will not smudge and soil other sketches. Wash and color are sometimes used, alone or in combination with other media.

Whatever the medium, if many sketches are to be made it is best to preserve them for future reference and therefore advisable to use paper of some uniform size. The history student will doubtless keep a notebook and the sketches should of course be of size to bind with the notes. Covers can be obtained easily for such standard sized sheets as 8" x 10½" or 8½" x 11".

When the student has selected his materials and his photograph he is ready to draw. It is essential that his sketch be small and simple, the most direct interpretation possible of the important character-

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Sketches Made from Photographs of the Pantheon and the Dome of St. Peter's, by Arthur L. Guptill.
This sheet is reproduced at the exact size of the original.

PENCIL POINTS

istics of the particular building under consideration (in this case the Pantheon) as depicted in the photograph before him. Just a few lines to block out the main proportions, a few more strokes to suggest the larger subdivisions, followed by a mere indication of the most important detail. If the photograph seems to call for it, a bit of shading may be done in a simple manner. And nothing more. Two or three minutes is long enough for the first sketch; —then another should be done in just the same way, and perhaps a third, the number depending on the skill of the student and the amount of concentration given to the subject. And all the time the memorizing process should go on.

Now comes the crucial test. The student should put all sketches and photographs out of sight and try a sketch or two from memory. It may be necessary for him to glance at the photograph once or twice for an instant but he should avoid doing so unless it seems absolutely necessary. If he fails altogether he should study the photograph again with care, then try once more to draw from memory, repeating the process until the important facts are fixed in mind.

Next he should try similar sketches of the same building from other viewpoints, both exterior and interior, as well as from the plans and sections, and when the whole seems well mastered he should wait a week or a month (going on in the meanwhile with similar study of other subjects) and then test his memory of it again, making a few more sketches if necessary, until finally he has a picture of it indelibly impressed upon him.

On page 50 are shown at "A", "B", "C" and "D" some thumbnail pencil sketches of the Pantheon of the type just described. On the same page are similar sketches of the dome of St. Peter's, also at Rome. This sheet is reproduced at the exact size of the original drawing, which was done on smooth paper with a sharply pointed B pencil.

Naturally it is advisable to group sketches in some such logical manner, basing the grouping on common factors like similarity of form, material, use, period or location. Not only should sketches of complete buildings or large details be so grouped, but it is instructive to arrange sheets of smaller details such as doorways, windows, chimneys, balconies and pediments as well as ornamental motives of various kinds.

On the face of it this all sounds like a great undertaking, but even so the time and effort will be advantageously expended. For if the method of study, which we have mentioned here in connection with the Pantheon, be applied to the best examples of architecture of each country and period the student cannot fail to gain a broader knowledge of them than is usually acquired, particularly if he notes on his sketches facts concerning building materials employed, color schemes, scale, dates of construction, names of architects and other essential matters and tries to memorize them as well. And what is perhaps still more important he will cultivate his powers of observation, analysis and retention, and

will almost unconsciously assimilate a knowledge of many underlying principles of design and construction, thus fitting himself to understand and enjoy architecture of the past and to more intelligently design architecture for the present and future. Then too he will gain improved facility in quick sketching, of itself of inestimable value.

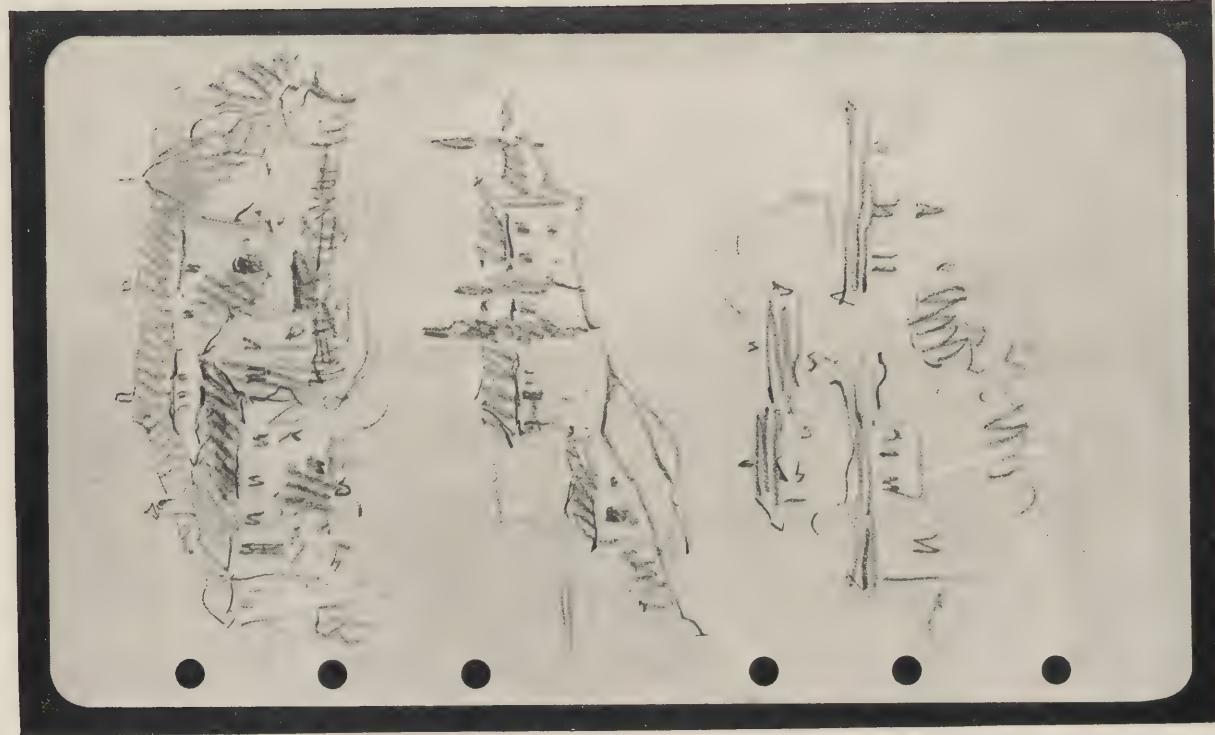
Now just as the student of architectural history can profit by the use of thumbnail sketches in the manner just described, so the architect or draftsman can benefit by their use in a very similar way. If he is already familiar with historical subjects, both at home and abroad, he should sketch from photographs of the best contemporaneous work as it is shown from month to month in the architectural periodicals. This will keep him posted on what is being done by the leaders of the profession here and elsewhere which in turn will help to keep him from falling into a rut and overworking a few ideas.

In making these sketches from the magazines it is worth while to note on each the name of the architect of the building sketched, the name and page number of the magazine itself, etc.

And as sketches of this sort collect, it becomes necessary to group them in much the same way as the historical sketches. Houses may be grouped together, for instance, and so may churches and schools. Or arrangements may be made according to location. As an example of this, page 48 reproduces at the size of the originals a number of thumbnail sketches made from photographs of subjects in our own city of Washington. By making groups like this it is easy to get to know the most important edifices of different sections of the country.

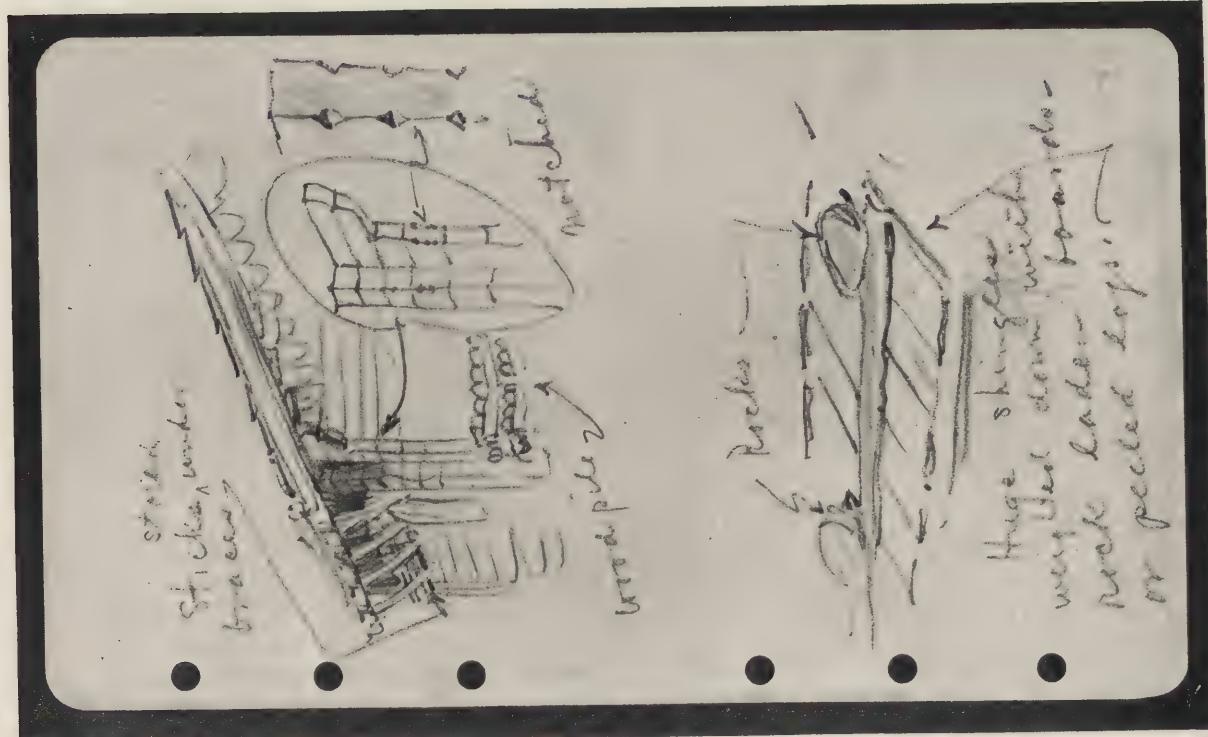
So far we have mentioned only the drawing of buildings from photographs, but if one is so fortunate as to live near fine examples of architecture, or to be able to visit them, he should by all means take advantage of his opportunity. One obviously gets a more accurate and complete impression from a building than from a photograph of it, especially as to scale, color, texture of materials, and the like. For these details of appearance he should study and sketch each building from near at hand. At close range its bulk and complexity may prove confusing, however, so for gaining knowledge of its composition as a whole it is often better to study and sketch from some distance, if possible, and from various points of view. And even then it is sometimes advisable to supplement all this by work from photographs of the same building in the way which has already been described.

The architect or draftsman should above all things not fail to become familiar with the important architecture of his own locality, so far as he can, both through seeing it and through photographs of it. Very few architects really know the buildings which they see almost every day. Can you draw from memory your church or bank or post office and get it even approximately right? You may think you can, but try it. Do you pass some important example of architecture frequently, perhaps daily?



From the Window of a Moving Train.

Thumbnail Sketches by Arthur L. Guptill. Reproduced at the Exact Size of the Originals.



Made During a Stop of the Train.

PENCIL POINTS

If so try to draw it or even to describe it well. Can you? Be honest with yourself. If not, the thumbnail sketch can help you.

One can hardly expect to memorize every bit of architecture that he sees or studies in photographs, however, so let us consider the thumbnail sketch as it is sometimes used in a still different way from these so far discussed.

Let us assume that the architect or draftsman is making designs in plan and elevation for an arched doorway for an apartment house or hotel. He remembers having seen similar entrances on nearby buildings which he thinks may offer suggestions to help him in his problem. During the noon hour, or at some other convenient time, he visits these and after studying each to try to fix it in his mind he makes tiny sketches of it to serve as memory joggers after his return to the office. Sometimes he makes similar sketches at the same time showing how he hopes to adapt the schemes to his own work. It matters little what these are drawn upon, though many draftsmen have pocket sketchbooks for this sort of work, saving pages for archways, others for dormer windows, still others for chimneys and so on.

All too often such sketches are thrown away once their original purpose is accomplished. They really should be preserved and gone over occasionally. Even though the individual sketches seem hardly worth while, no matter how crude they may be, they may later serve as valuable reminders of much which they make no pretense of plainly picturing.

Now we come to one of the most valuable types of thumbnail sketch, for in addition to these different kinds such as we have discussed, done more or less leisurely and from a stationary position, there is a kind which, though more sketchy and less perfect and conveying less information to the average person, is, nevertheless, a most useful type.

Imagine that you, an architect or draftsman or student, are riding on a railroad train, and suppose you see from the window some building or part of a building which interests you, possibly because of its charm of proportion or quaintness of design. Perhaps it offers some solution of value to you in some problem of your own. You would like time to study it carefully or the opportunity to photograph it or draw it painstakingly, but the minutes are too few; the speed of the train too great. You snatch an old envelope from your pocket or find an inch of space on the margin of your newspaper and sketch with all your might with pencil or fountain pen. There is no time for detail. The essentials are seized and interpreted in the fewest possible lines or tones. No worry is given to perfect proportion or perspective; no thought to technique. Notes are added descriptive of the color scheme or of such things as cannot be drawn and the thing is done. The subject itself may be out of sight before the sketch is half finished, but the mental image will usually last long enough to permit a fair interpretation of it on paper. It matters not one whit whether the sketch means anything to anyone but

yourself;—even though it seems a snarl of meaningless lines to the casual observer, it may be alive with information vital to you, and that is all that counts.

The sketches on pages 52 and 57 are to illustrate this sort of work. The first was done by the writer from a train window in Italy while the train was in motion. The building was out of sight before the sketch was finished, but the last lines were added while the eye still retained a fairly accurate impression. The irregularities of line are due to the vibration of the train and the hastiness of the work. The second was made on a moving boat in Holland, drawn with a fountain pen, and the third was done in Switzerland from the window of a train which had stopped for a moment.

As a rule if one draws from such moving conveyances, distant objects are much easier to do than are things nearby, for they remain in sight longer and show less apparent perspective and confusing detail.

Page 54 shows additional examples of similar sketches done in pen for a somewhat different purpose. During a recent trip to Italy the author motored from Siena to Pisa and later from Pisa to Florence. On the way many interesting places were visited and sketched. Circumstances did not permit stopping for everything worth while, however, so many notes were taken enroute, and page after page of thumbnail sketches was made while in motion, to supplement the notes. The roads were rough and the sketches more so. The pencil fairly bounced; the writing was almost illegible. Consequently at Florence, where leisure was found for more careful work, some of the pages, including the one reproduced here, were redone in ink while the subjects were still fresh in mind. No attempt was made in the redrawing to do more than increase the legibility of the originals.

Page 55 reproduces at the top some similar sketches illustrating details of design and construction, these having been done at about the same time as those just described.

The drawing of the farmhouse at the bottom illustrates an application of motives recorded by means of thumbnail sketches, for this is a sort of composite picture drawn in Florence soon after the ride to which we have just alluded. The form of the house itself was taken from one of the thumbnail sketches previously made, the well from a second, the stacks from a third and the archway from a fourth, so the sketch as it appears represents not one actual house just as it stands, but is in a way an original composition combining parts of several, care being taken to preserve the true character of such structures as are seen in this region.

A somewhat similar use of thumbnail sketches in work in original architectural design is so general that nothing more than a word in passing seems necessary, merely to call attention to the fact that many of our best known architects put their first schemes for even their largest structures on paper at tiny size, often in perspective and as freely drawn as some of these which we have shown, and then

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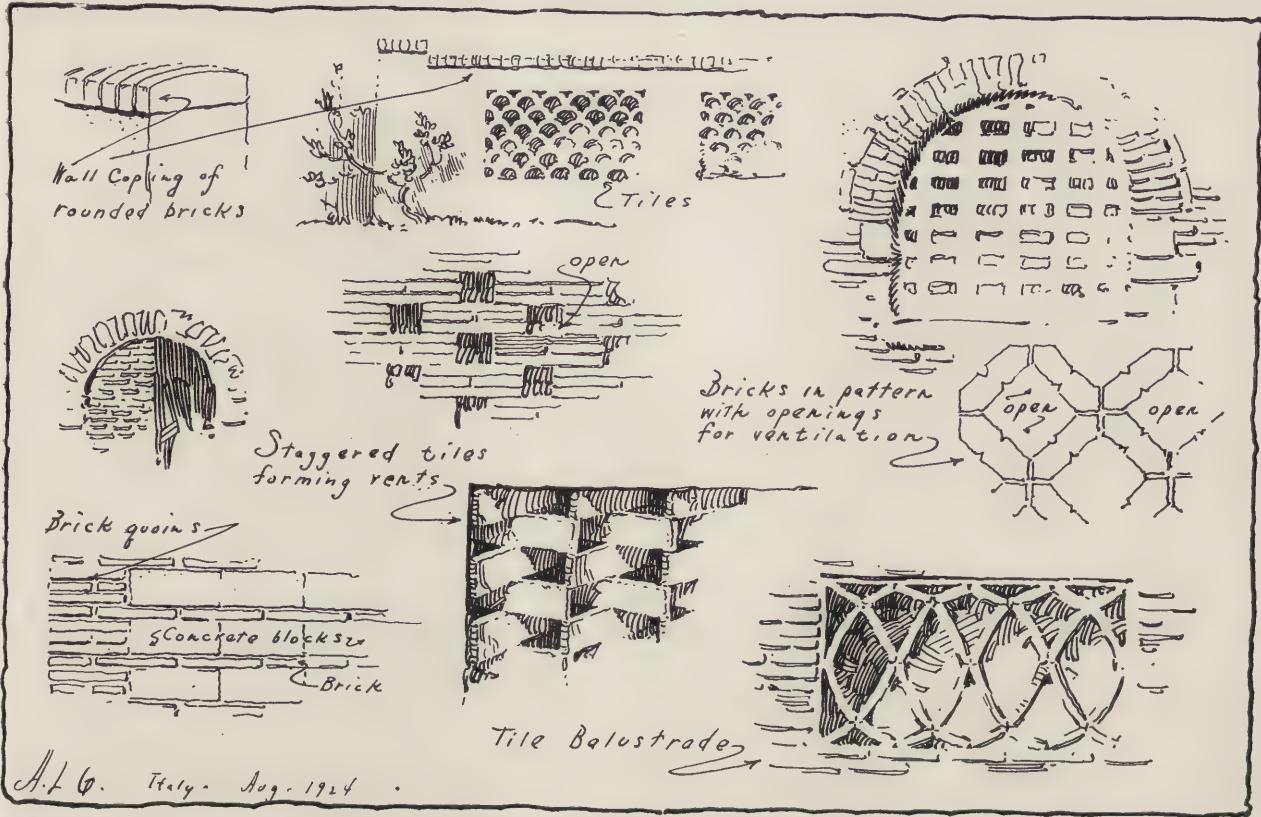


Farmhouses near Siena,
Pisa, Empoli - Prato

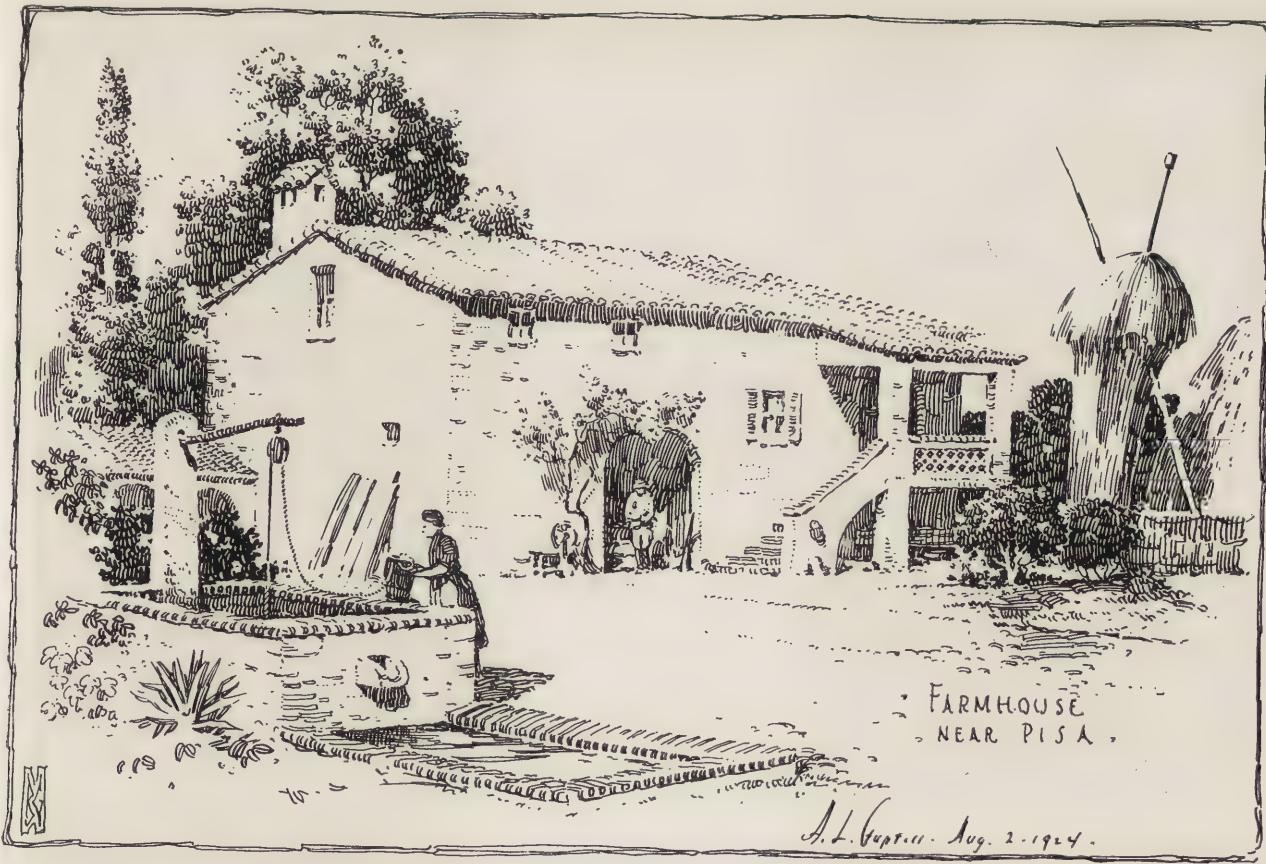
A. L. Guptill - Italy - July 1924

Thumbnail Sketches by Arthur L. Guptill Redrawn in Ink from Pencil Sketches Made on a Motor Trip.

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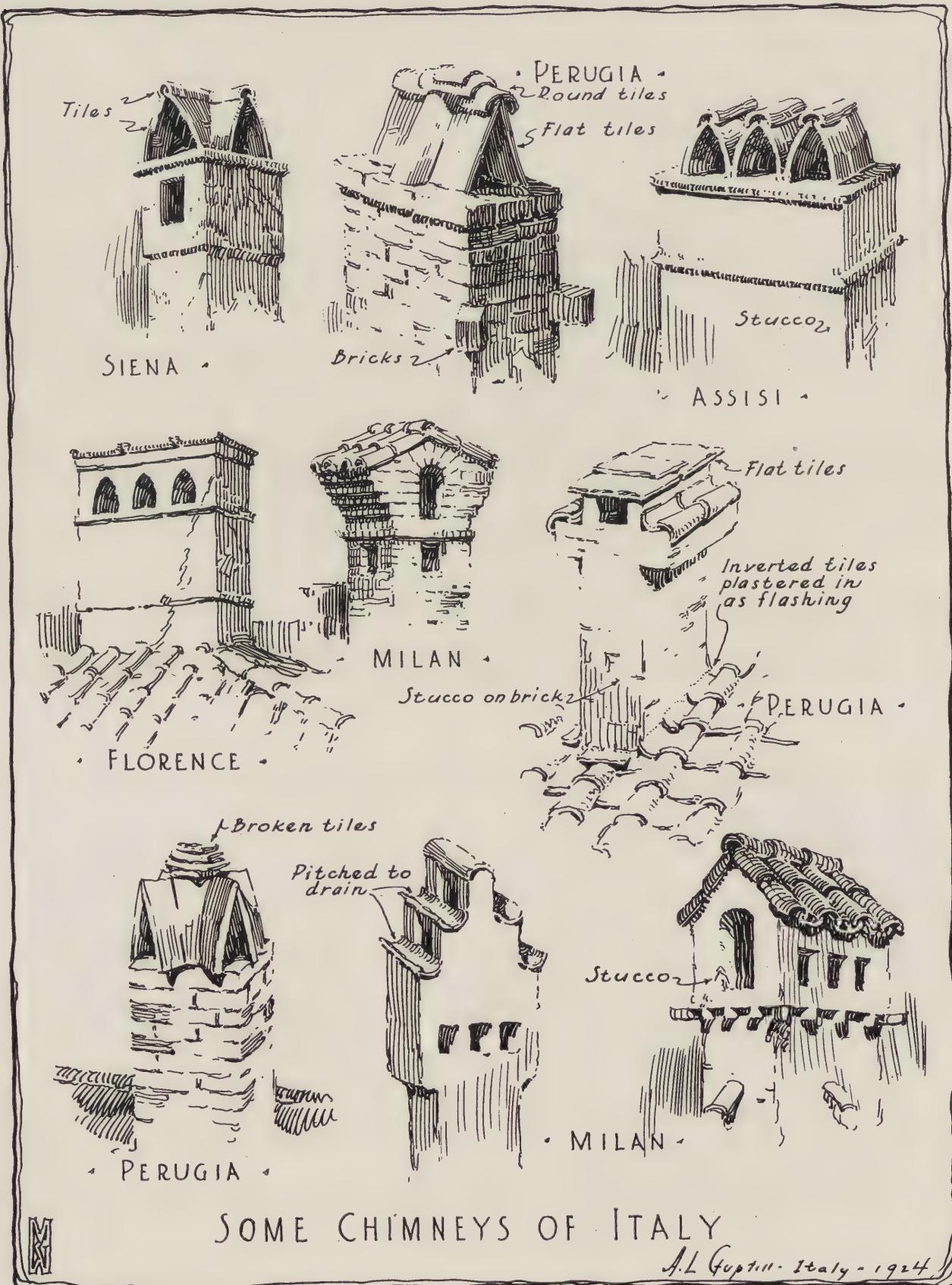
A.L.G. Italy - Aug. 1924.



Above, Sketches Illustrating Details of Design and Construction. The Farmhouse Below Illustrates an Application of Motives Recorded by Means of Thumbnail Sketches.

Sketches by Arthur L. Guptill.

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Thumbnail Sketches by Arthur L. Guptill. This sheet is reproduced at the exact size of the original.

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later, as their schemes progress, resort to thumbnail sketches or studies again and again as the smaller details come up for consideration.

All these, then, are among the most common uses to which thumbnail sketches are put, but there are many others which will come to mind once an acquaintance is made with this type of work.

And so far as the making of them is concerned it seems needless to add more, in closing, than a word of warning, reiterating that such sketches should be sketches, not miniature renderings crowded with detail at the expense of the eyesight and reserve of patience of the artist,—not labored

over, erased, changed. Instead, they should be drawn directly, boldly, crisply, with the work in suggestive outline or simple values. And one should not burden himself with elaborate equipment for drawing; any paper will do and any medium. Remember, too, if working from a photograph, that small ones are usually better than large, and if sketching from buildings, that it is generally best not to stand too close to them. And above all bear in mind that it is not what you put on the paper or how you do it but what you can put and hold in your head for future use that will probably prove most valuable in the end.



Drawn by Arthur L. Guptill, with a Fountain Pen from a Moving Boat in Holland.

PENCIL POINTS



The Beacon of Progress, Detail of Elevation, by Désiré Despradelle.

MASTER DRAFTSMEN, XI

DÉSIRÉ DESPRADELLE 1862-1912

DESPRADELLE was born at Chaumont (Yonne) France, and died at Boston, Massachusetts. He came to Boston in 1893, from Paris, to become Rotch professor of architecture at the Massachusetts Institute of Technology where he first became known to American students of architecture through his work as a teacher. In 1899, the important international competition for the general design for the buildings and grounds of the University of California, at Berkeley, drew attention to his strength as an architect by the reasoning of his fine plan — which won third prize — and the brilliant style of its artistic presentation. He became a member of the permanent board of advisers of the building of that University. Two years later he was appointed consulting architect of the new buildings of the Boston Museum of Fine Arts. In collaboration with his partner, Mr. Stephen Codman, he designed several important buildings in Boston and its vicinity and was among the earliest of designers to recognize the artistic value of the vertical characteristic of the American type of office building construction. He won the competition for the Peter Bent Brigham Hospital buildings at Boston. In 1910 he was appointed Special Lecturer on Architectural Design at Harvard University. His executed work bears evidence of architectural talent of the highest order and one only regrets that it had to be expended mainly upon buildings of a utilitarian nature, such as office buildings, hospitals, factories, etc., which are certain of destruction within a comparatively short period of time. While they last, they will continue to exert a beneficial influence for virility in American design—a leaven to our tendency to a rather tedious scholarship on the one hand and affected naïvité on the other.

As a student designer and draftsman he was brilliant from the start. He entered the *Ecole des Beaux Arts* at the age of twenty, winning first place among one hundred and forty candidates, and entered the Atelier Pascal where he remained seven years. During this period spent under Pascal's guidance he won the *Prix de la Societe Central des*

Architectes Français, and the famous Rougevin, Deschaumes, Edouard Labarre and Bouwens prizes. He received the diploma of the *Ecole* in 1886. In 1889 his design for a bathing establishment was placed first in the competition for the *Grand Prix de Rome*. The principal prize was not awarded

that year and the prize awarded to Despradelle was that known as the *Premier Second Grand Prix*. The same year he was made *Laureat de l'Institut de France*.

He made his *logé* and competed in 1890, the subject being *A Monument to Jeanne d'Arc*; and once more in 1892, when the problem was a *Musée d'Artillerie*. Then came the opportunity to come to the Boston "Tech".

During the three years from 1889 he travelled on the continent of Europe; was an Inspector for the French Government and Collaborator of Public Buildings and National Palaces with headquarters at Paris and at the same time carried on his higher academic studies at the *Beaux-Arts*. Under the rules of award of the *Grands Prix* a student who has won the premier second prize can win only the

premier prize thereafter, as he is disqualified from winning second place twice, or any lower award. From older men at the *Ecole* the writer learned that opinion was almost evenly divided between the winners and Despradelle, both in 1890 and 1892, as to which should have won the prize. One of Pascal's older pupils told me that Despradelle was "the legitimate winner of the *Premier Grand Prix*, three times." We must make allowances for such assertions coming from enthusiastic juniors to a particularly famous leading student in a French atelier in which the *esprit de corps* has long been notable; but whatever the actual rank in competition, the evidence afforded by Despradelle's drawings, now in the Massachusetts Institute of Technology, is sufficient to establish his work in each competition as worthy of *Grand Prix* rank. His reputation had become international before he received the invitation to come to America, yet it was some years after he came to this country that his

(Continued on page 70)



Désiré Despradelle

PENCIL POINTS



Beacon of Progress, by Désiré Despradelle.

PENCIL POINTS

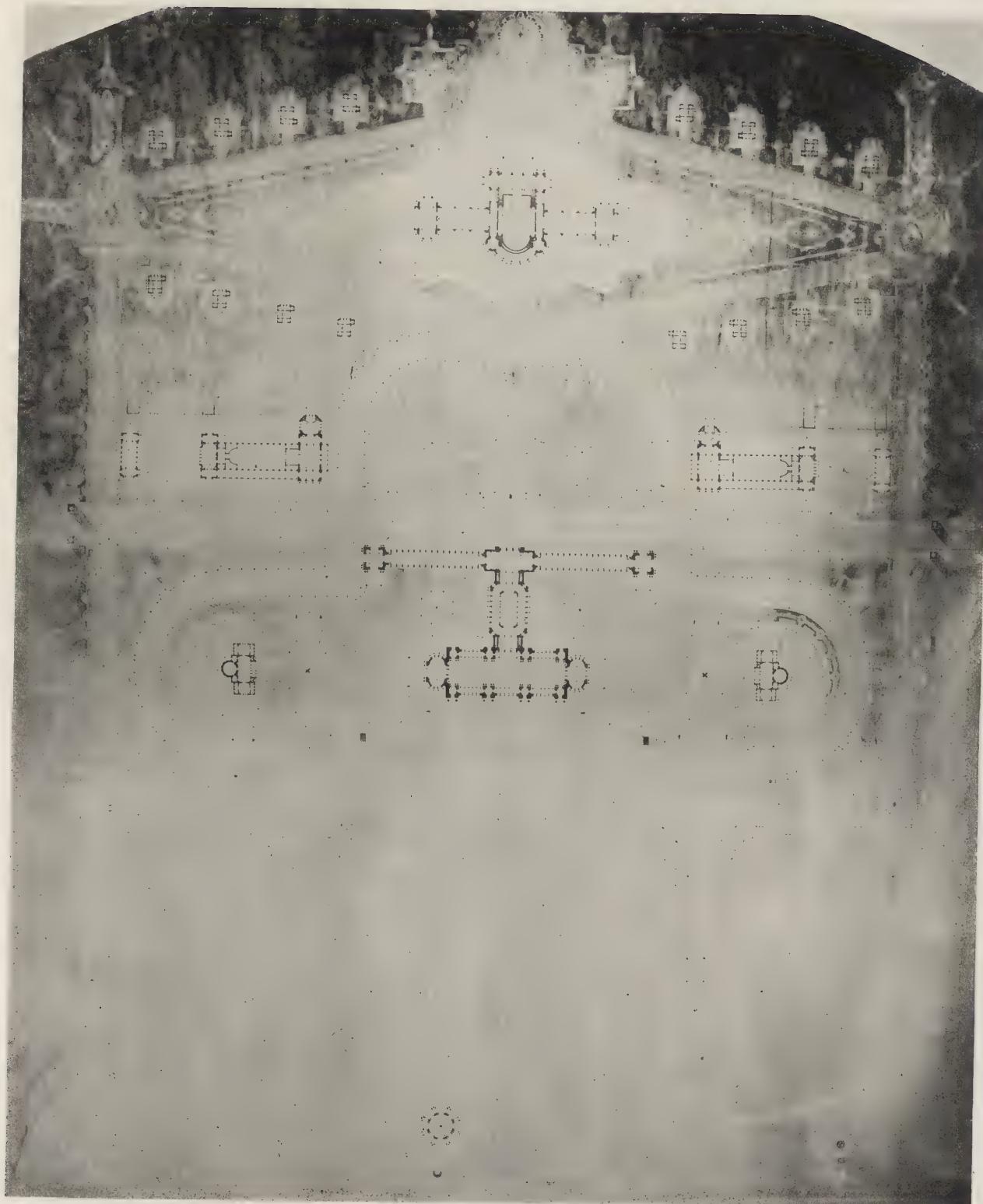


Detail of Perspective, Beacon of Progress, by Désiré Despradelle.



Drawing Made to Show the Great Scale of the Beacon of Progress, by Désiré Despradelle.

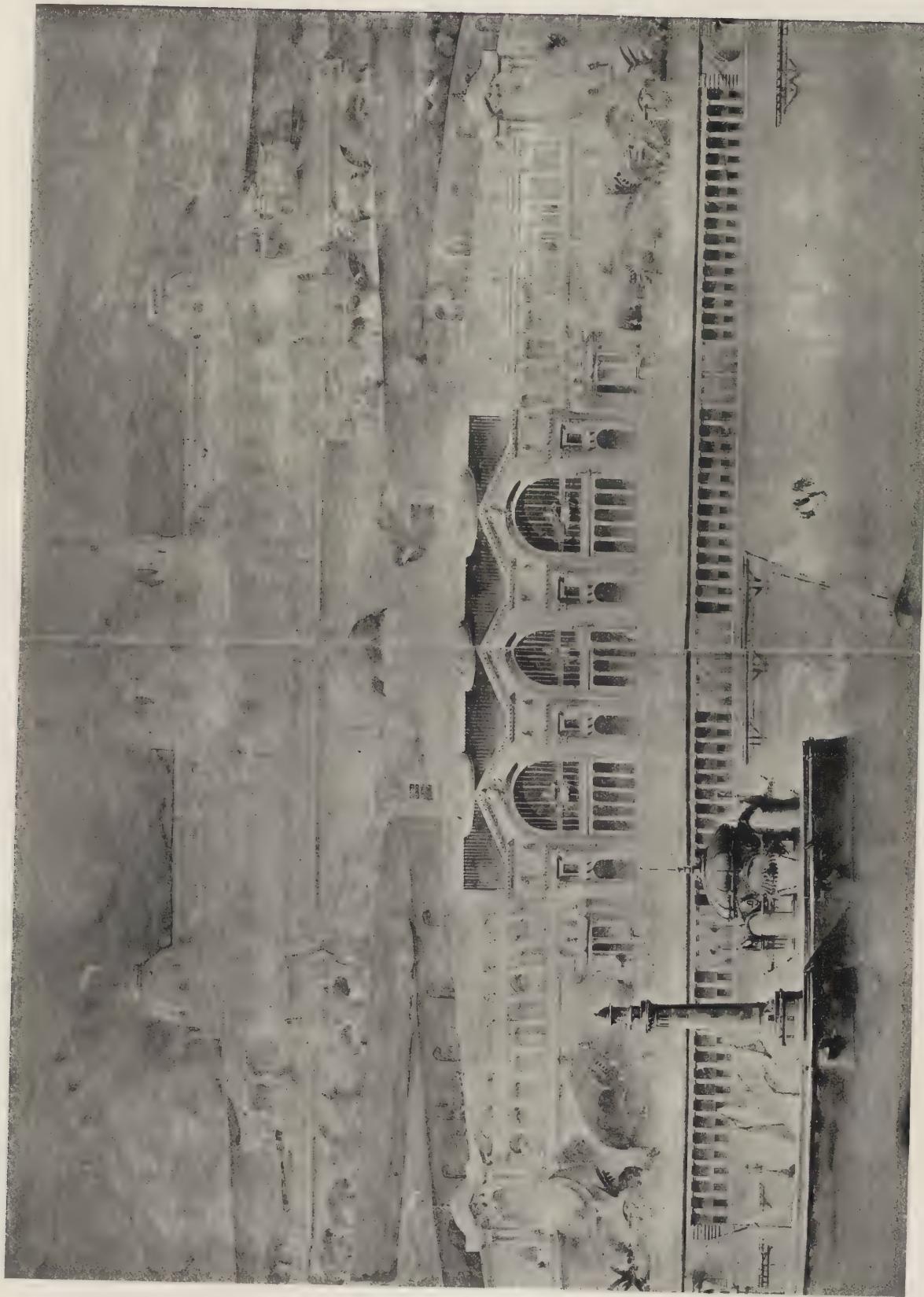
PENCIL POINTS



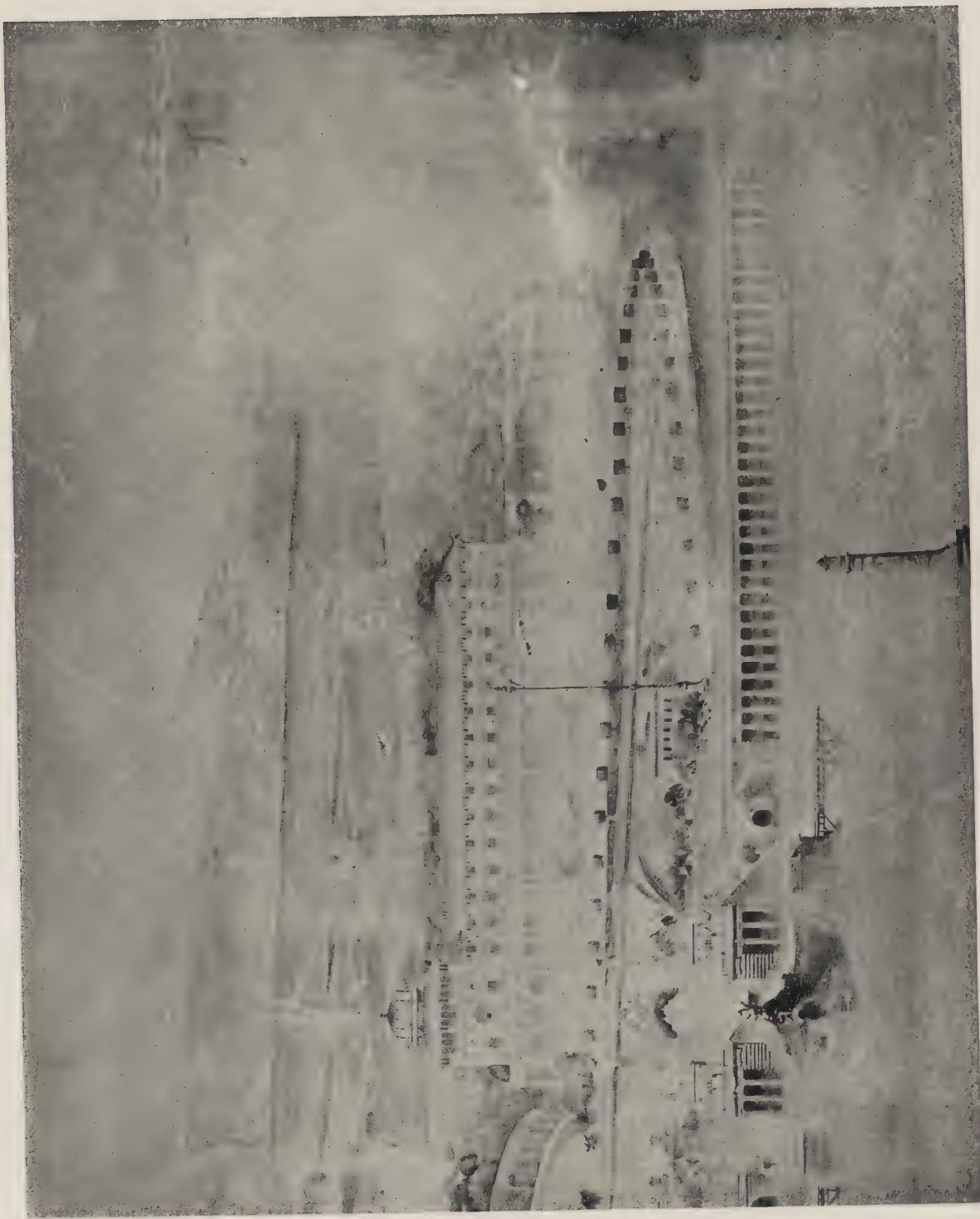
Plan of Bathing Establishment: 1st Second Grand Prix de Rome, 1889. By Désiré Despradelle.

Part of Elevation—Left. Bathing Establishment, 1st Second Grand Prix de Rome. By Désiré Despradelle.



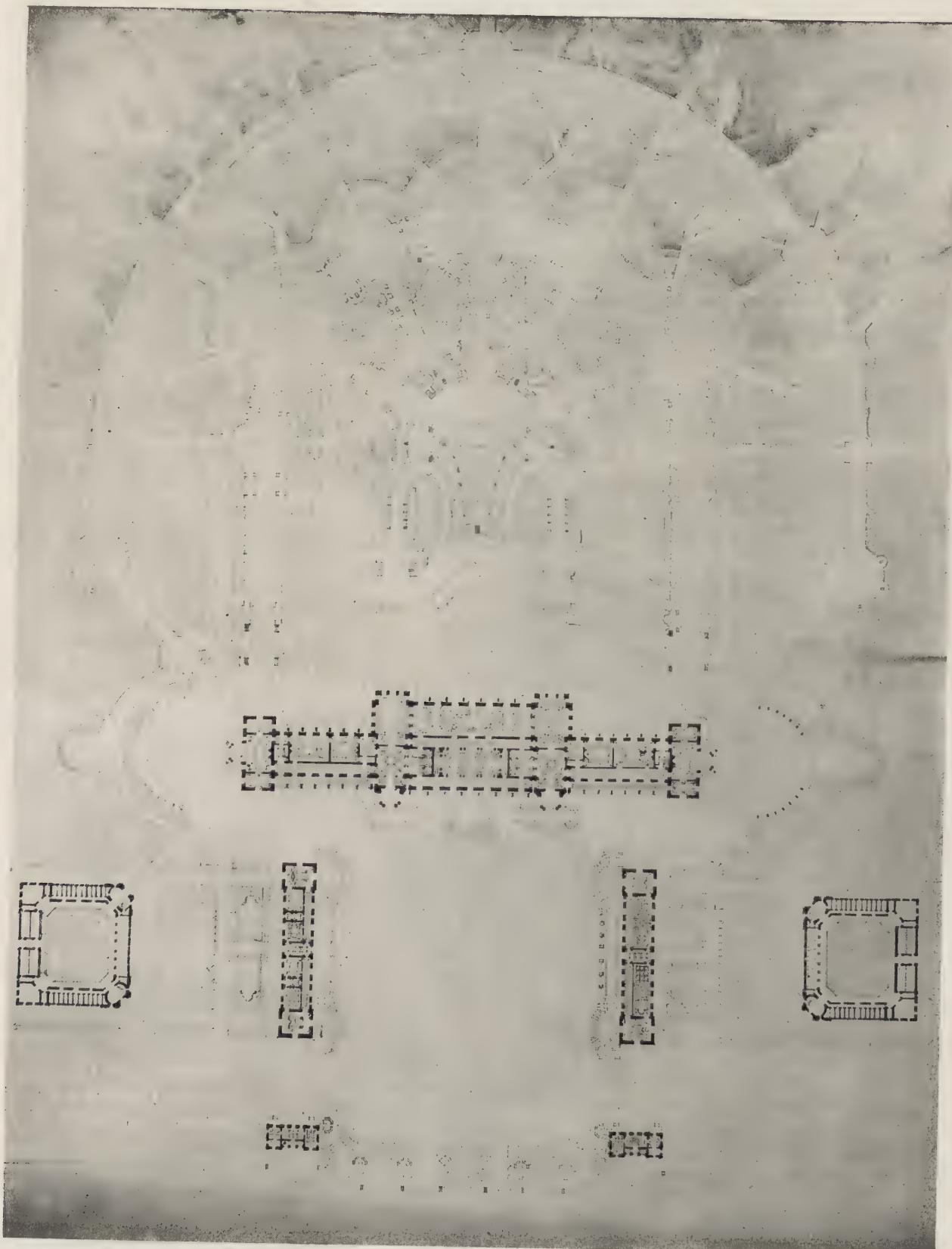


Part of Elevation—Center. Bathing Establishment, 1st Second Grand Prix de Rome, 1889. By Désiré Despradelle.

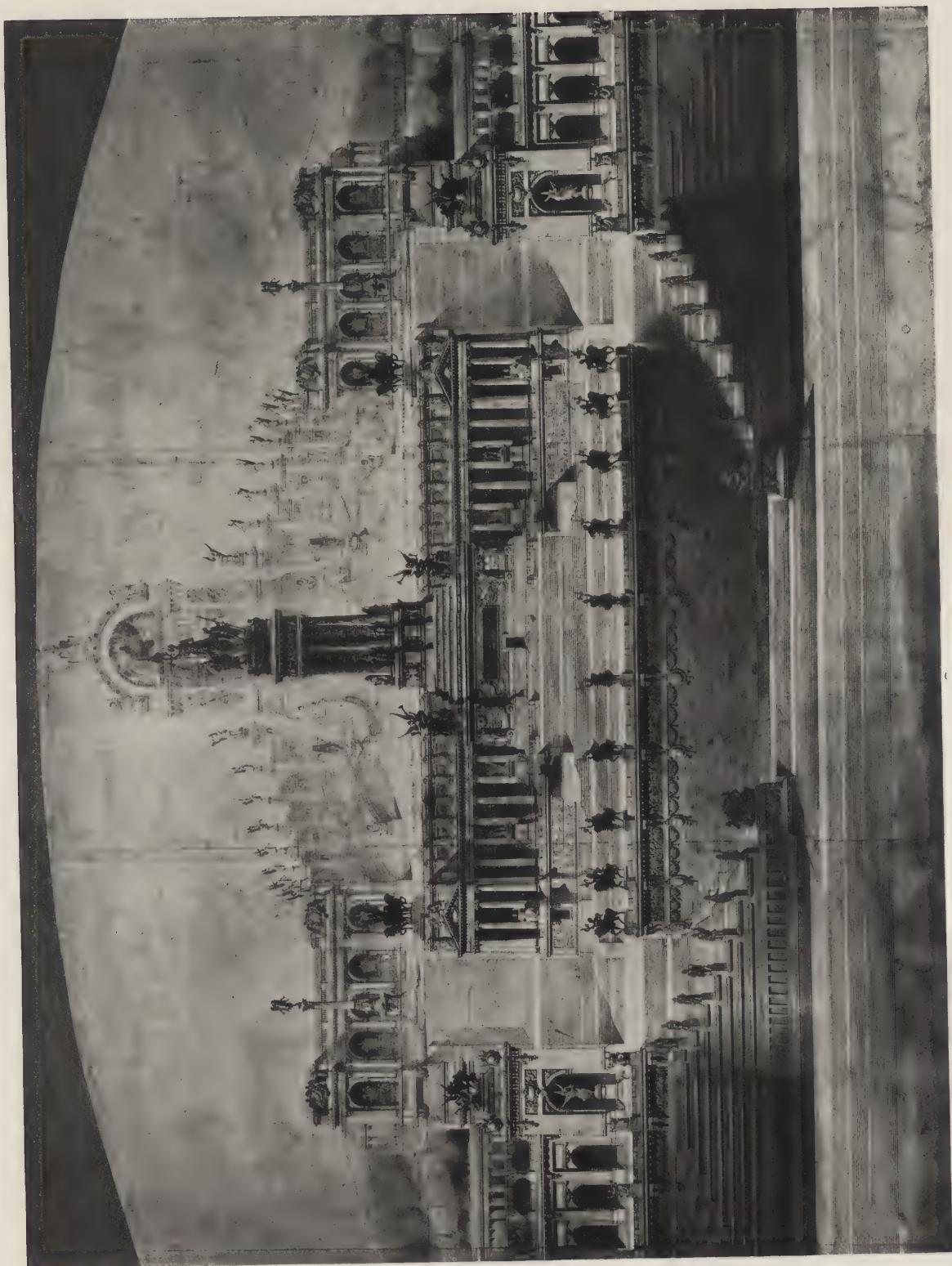


Part of Elevation—Right. Bathing Establishment, 1st Second Grand Prix de Rome, 1889. By Désiré Despradelle.

PENCIL POINTS



Plan, Military Officers' Club. La Barre Prize, 1884. By Désiré Despradelle.



Part of Elevation, Projet for the Grand Prix de Rome, 1890. A Monument to Jeanne d'Arc. By Désiré Despradelle.



Un Chateau d'Eau. Rougovin Prize, 1887, by Désiré Despradelle.

PENCIL POINTS

MASTER DRAFTSMEN, XI.

Désiré Despradelle, 1862-1912.

(Continued from page 59)

technique and brilliant style as a portrayer of his architectural conceptions reached their zenith, culminating in his wonderful design for the Beacon of Progress. For sheer imaginative power and sustained conception throughout the long process necessary to its presentation, I know of nothing in the archives of architectural drawing equal to the series of drawings he produced for that ideal monument. He worked on the design about six years, making part of the drawings at Boston and part of them at Paris. One of the men who "niggled" for him at Paris told me of how the design grew in height from his first studies of about 1,000 feet to his final of 1,500 feet. "We would first draw an elevation," he said, "of the proportions 'Deppy' had indicated by his sketches, then he would come in fresh in the morning and say: 'It is too thin, we will make it this wide,' and would increase its thickness. Then he would tell me to lay out a perspective to get the diagonal bulk against the sky. We would darken the sky and the white obelisk against the dark background would appear much wider than the dark silhouette of the elevation had seemed against the white paper background"—(this being due to ordinary optical illusion, and apart from the difference due to the diagonal of the square shaft). "Then 'Deppy' would say: 'It is too thick, we must make it higher'; and he would add to its height by extending the design at the top. Then he would go back to making a new elevation, then another perspective, and so on, until by the time he got the proportions to his satisfaction he had increased the height fifty per cent."

Mr. Despradelle told a joke on himself about that increase in height. He had at the beginning made some calculations of the thickness of walls required at the base, and the area he could allow for the great hall within in order to construct the monument of granite. In the series of studies, increasing the height, that was lost sight of until after all the drawings were finally rendered and he was writing a memoir. Then he checked his loads and found he had not allowed sufficient bearing for granite. "Well," he said, "we shall have to restudy the size of the chamber—or, if there isn't time, before the contract must be let, we shall have to put in some steel!"

While he was at work on his studies of the "Beacon" in 1899 he was made an *Officier d'Academie* by the French Government. The following year the design was exhibited at the *Salon* and he received the award of the first gold medal. The award placed him *hors concours*—he had reached the apex of ability—there was nothing further for him to strive after, in the opinion of the Jury of

the *Salon*. Two of his drawings of this design were purchased by the French Government for the Luxembourg—a rare honor for a painter or sculptor and rarer still for an architect. Those drawings formed part of the French national exhibit of Fine Arts which was sent to the Franco-British Exposition at London in 1908, where they were an outstanding feature of the architectural section in an exhibit which, as a whole, was the finest of the many modern collections that I have had the good fortune to see. At the Fine Art Shows, at the Expositions and the annual exhibitions of the Royal Academy in London and the *Salons* of Paris it has always been apparent that the public is apathetic to the architectural section. It was, therefore, remarkable that throughout the summer when the Franco-British Exposition was held, and on each of the many visits which I had occasion to make to the Arts building, I always found a number of people scrutinizing those drawings by Despradelle. They seemed to weave a spell of fascination which the pictures by the greatest painters of our time failed to achieve.

The Beacon of Progress as designed by Mr. Despradelle was supposed to be placed on the site of the World's Fair at Chicago, facing Lake Michigan. The scale and size of the site determined the size of the monument. To combine the decorative elements of architecture and human scale with such titanic dimensions and maintain a sense of effective relationship between them was a Herculean task to undertake. The graceful form and noble dignity of the conception so well express the glorification of the ideal of progress that it requires an effort to draw away from the poetic and inspiring aspects and turn to the technical methods by which the conception has been so successfully conveyed.

Even in the examination of the original drawings the writer found it impossible to follow the processes employed in modelling the drawings of the whole composition. The profound artistic style of presentation eludes discovery of the starting point, hence of the development of the planes and from them to the minor elements and details. The perspective of the detail of the base gives some idea of the subconscious—almost automatic—play of academic training in methodical workmanship, which is, at first, lost in the somewhat Piranesian effect of the whole drawing, and the broad modelling is so well disguised under a cloak of inspirational sketching, erasing and piquage—with brush, pencil and scraper, as to be almost indistinguishable. It is necessary to turn the drawing upside down in order to lose its aspect and search out the positions of the larger sharply graded washes, and determine as to which parts were put in with broad washes and which with a point.

FRANCIS S. SWALES.

PENCIL POINTS

VOL. VI. No. 5

PLATE XVII



RENDERING BY THEODORE de POSTELS.
OFFICE BUILDING TO BE ERECTED BY THE EQUITABLE TRUST COMPANY, NEW YORK.
TROWBRIDGE & LIVINGSTON, ARCHITECTS

On the other side of this sheet is reproduced one of the latest of Theodore de Postels' renderings, one of the finest examples of his work: It shows a happy balancing of the requirements of an architectural rendering, for it is sufficiently explicit in its statement of facts without any neglect or loss of pictorial quality. From the standpoint of pure technique it is also worthy of careful study.

PENCIL POINTS

VOL. VI. No. 5

PLATE XVIII



MIRAFIORE, A GARDEN GROUP BY EDMOND R. AMATEIS.

The garden group shown on the other side of this sheet is the work of Edmond R. Amateis, Fellow in the American Academy in Rome, and is notable for its beauty, particularly for the charm of its well harmonized curves and for its tenderness. The conventionalization of parts, such as the garland of flowers and of the hair, accentuates the tenderness of the figures themselves which are treated in a naturalistic manner but somewhat idealized.

PENCIL POINTS

VOL. VI. No. 5

PLATE XIX



PAINTED SCREEN BY ROBERT W. CHANLER.

The screen by Chanler, shown on the other side of this sheet, is very effective and pleasing in general appearance and is, besides, an interesting study in the composition of rhythmic lines suggesting movement.

PENCIL POINTS

VOL. VI. No. 5

PLATE XX



STUDY BY FRANK SCHWARZ.

The drawing by Frank Schwarz, shown on the other side of this sheet, is one of the many this artist made during his residence abroad as a Fellow of the American Academy in Rome. It shows one of the interesting types with which Italy abounds and the characterization is well done. This, and other studies by Mr. Schwarz, were made as a basis for painted decorations.

LEBRUN TRAVELING SCHOLARSHIP, 1925

REPORT OF THE JURY OF AWARD TO THE EXECUTIVE COMMITTEE, NEW YORK CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

THE Jury met on Friday afternoon, March 20, at 4:00 o'clock, and examined the drawings of all twenty-two competitors. A thorough discussion of the merits of the various solutions was held and, by a process of elimination, consideration was narrowed to nine competitors, as follows: Nos. 1, 5, 7, 10, 11, 15, 16, 17 and 19.

The Jury than adjourned and met again on Saturday morning, March 21st, at nine o'clock. It continued discussion of the relative merits of the schemes that had been retained and, as a result of two ballots, awarded the scholarship to competitor No. 11 and three mentions in order of merit to Nos. 1, 7 and 17.

In view of the high quality of the work, the Jury specially commended, without ranking, Nos. 5, 10, 15, 16 and 19. In making its award the Jury felt that Nos. 1 and 11 were solutions of great interest and which, from their differing points of view, were almost on a par.

It recognized, however, that No. 11 in its treatment of the great hall, giving easy access to different parts of the building, and in its treatment of the auditorium, was distinctly superior to No. 1 and that the entire solution showed more originality and imagination.

The Jury considered that the elevation of No. 1 was very charming in character. It followed very closely the Colonial tradition. The general disposition of the plan and the arrangement of the subsidiary rooms were excellent.

The plan of No. 7, particularly the arrangement of the Mayor's suite, with its large reception room, was excellent. The conception of this plan would have brought about a well-lighted ground floor and, while only the first floor plan was called for in the program, the Jury felt that its relation to the ground floor plan demanded consideration. The Jury also considered that the elevation resembled too nearly in character that of a museum or library.

The plan of No. 17 has some interesting features, notably the great promenade around the Assembly Hall and the introduction of an interior garden court, upon which the Mayor's suite and some small offices were faced. It was evident, however, that this solution would have brought about a most unsatisfactory condition on the ground floor and that, in this respect the plan was inferior to that of Nos. 11, 1 and 7. The elevation and the perspective were both well studied and presented.

The Jury then proceeded to an identification of the numbers and reports the results as follows:

No. 11—1st place and scholarship

Clarence W. Hunt, New York City.

- | | |
|----------------------------------|--|
| No. 1—2nd place and 1st mention | Will Rice Amon, New York City |
| No. 7—3rd place and 2nd mention | Charles H. Dornbusch, Princeton, N. J. |
| No. 17—4th place and 3rd mention | Louis Skidmore, Boston, Mass. |

- Those who are commended:
- | |
|---|
| No. 5—Henry A. Cook, New York City. |
| No. 10—Stanley W. Hahn, New York City. |
| No. 15—George N. Pauly, Pittsburgh, Pa. |
| No. 16—Raymond J. Percival, Hartford, Conn. |
| No. 19—Charles Morse Stotz, Pittsburgh, Pa. |

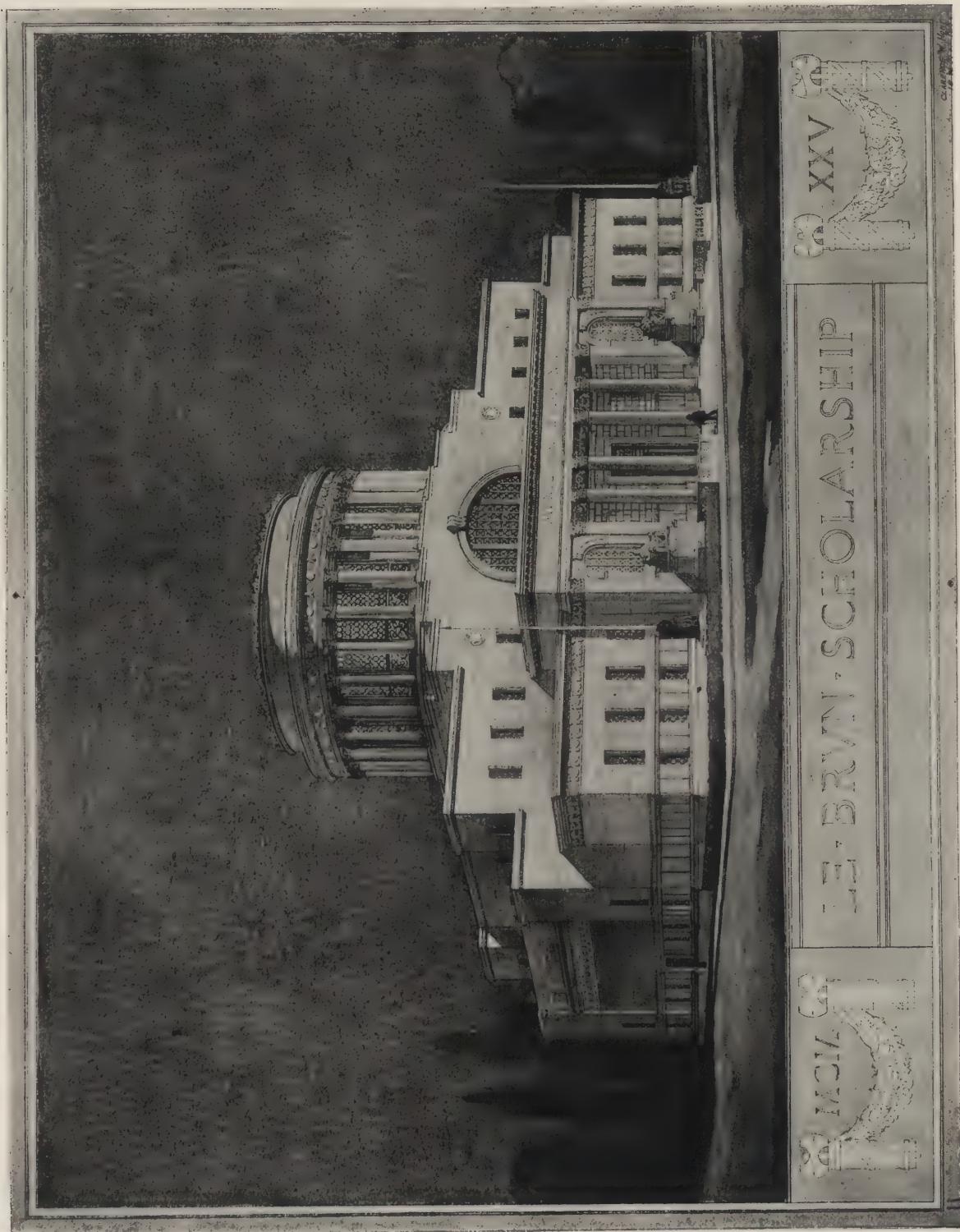
Respectfully submitted,
BENJAMIN WISTAR MORRIS,
WILLIAM F. LAMB,
CHARLES H. HIGGINS,
JULIAN CLARENCE LEVI, *Chairman.*

A MONOGRAPH OF THE WILLIAM K. VANDERBILT HOUSE

ONE of the finest of the architectural works of the late Richard Morris Hunt, the William K. Vanderbilt House on Fifth Avenue at Fifty-second Street, is to be demolished, giving way before the encroachment of business upon this old residential section of "the Avenue." In view of this, John V. Van Pelt has published a monograph of the house as a suitable record of this work of one of America's most distinguished architects. The monograph which is just off the press, is of de luxe character and in large portfolio form. It includes forty photographic plates of the building: general views, exterior and interior; portions of the building, details showing clearly the design and carving of ornament and the texture and tooling of the stone.

There are also twenty plates reproducing faithfully and clearly a score of Hunt's original drawings for the building: plans, elevations, sections and details, the drawings from which the house was built, some of them bearing the signatures of the contractors and the stamp of the architect.

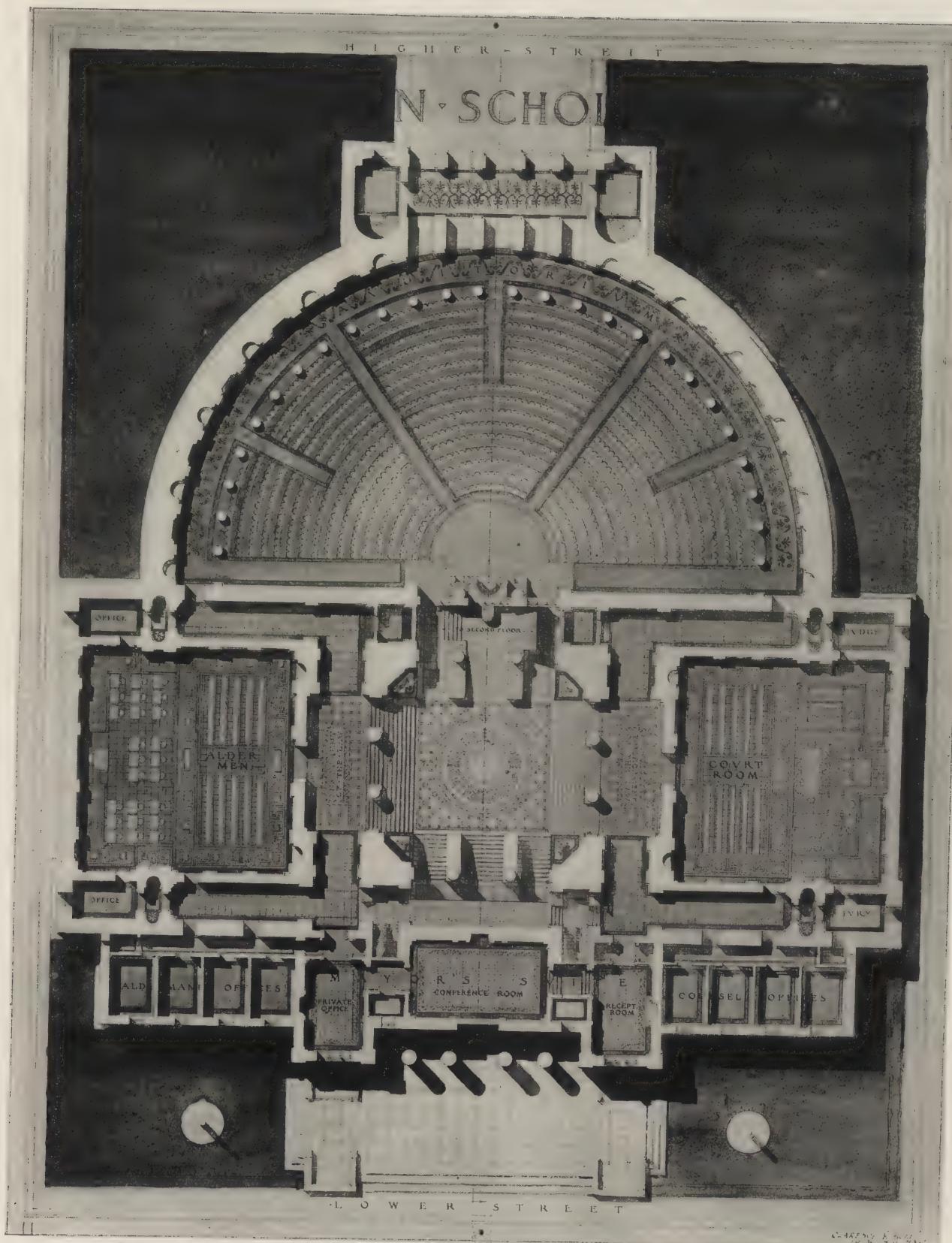
The text by Mr. Van Pelt contains an intimate account of Hunt that helps one to a better understanding of the man and his work and there is a full description of the building. Mr. Van Pelt has spared neither pains nor expense in producing a book worthy of the subject. "A Monograph of the William K. Vanderbilt House, Richard Morris Hunt, Architect," by John Vredenburgh Van Pelt. Price \$33.00, post paid. Published by John V. Van Pelt, 126 East 59th Street, New York City.



Perspective of Winning Design by Clarence W. Hunt, New York City.

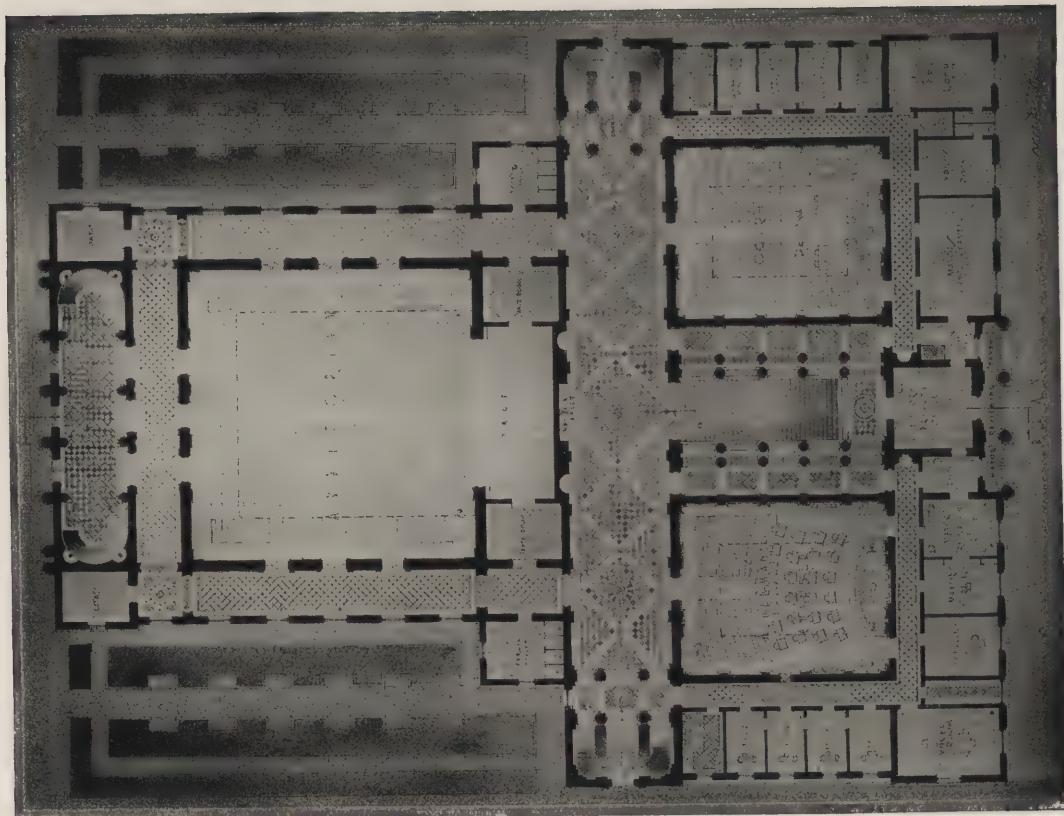
Le Brun Traveling Scholarship Competition for 1925.

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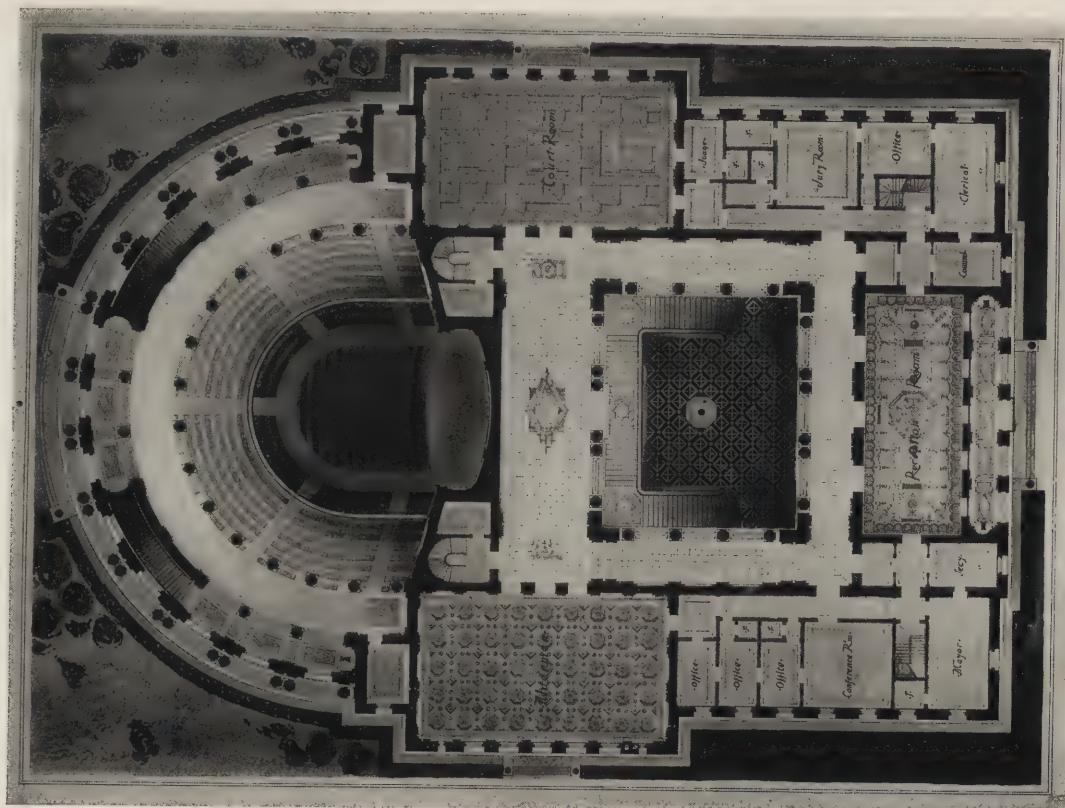
Plan of Winning Design by Clarence W. Hunt, New York City.
Le Brun Traveling Scholarship Competition for 1925.

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*Design by Will Rice Amon, New York City. Placed 2nd, 1st Mention.
Le Brun Traveling Scholarship Competition for 1925.*

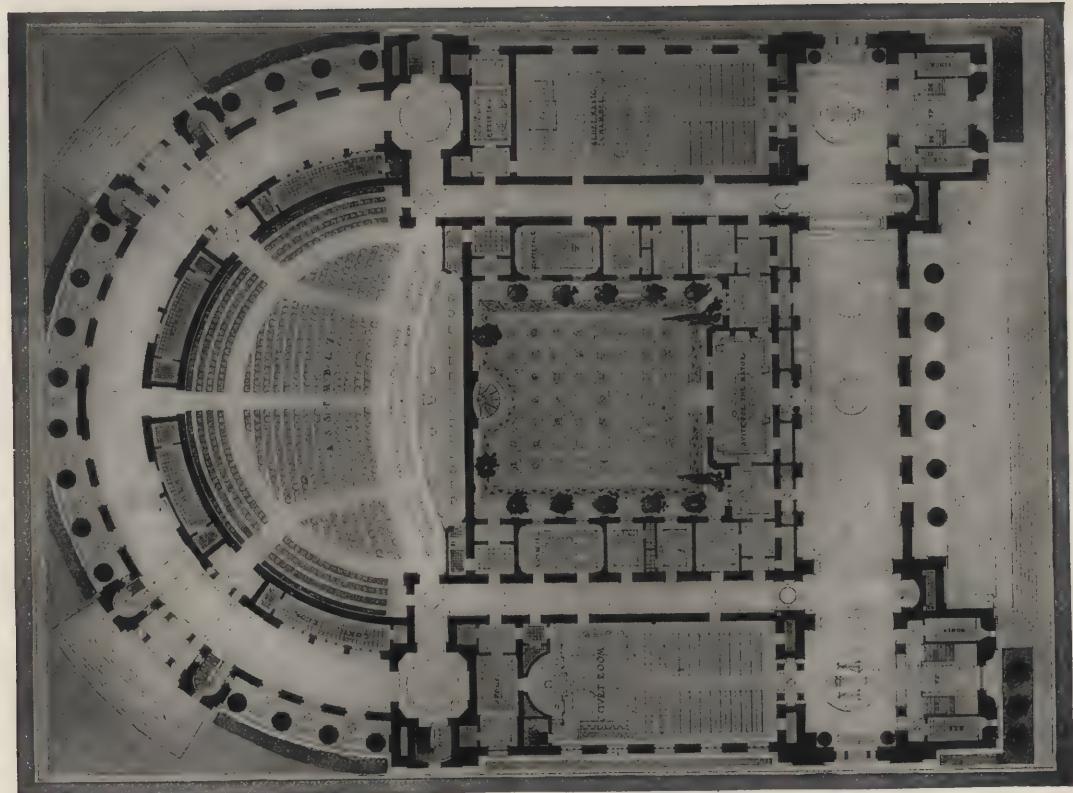
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Design by Charles H. Dornbusch, Graduate College, Princeton University. Placed 3rd,
2nd Mention.

Le Brun Traveling Scholarship Competition for 1925.

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*Design by Louis Skidmore, Boston, Mass. Placed 4th, 3rd Mention.
Le Brun Traveling Scholarship Competition for 1925.*

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME.

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"One more student has registered with us; he holds a fellowship in painting from the Yale School of Fine Arts, where both Ezra Winter and Eugene Savage, two Former Fellows in Painting, gave him instruction. The registration today is twenty one in the School of Classical Studies and twenty nine in the School of Fine Arts, giving a total of fifty in both Schools.

"I have reported to you from time to time that the Department of Fine Arts of the Italian Government has been arranging a plan whereby foreigners interested in villas may visit the best examples of Italian landscape art in every section of Italy. The scheme is almost ready. There are more than four hundred villas in Italy which for one artistic reason or other have been declared national monuments. No changes in these villas may be made without the approval of the Ministry of Fine Arts. The Government inspectors in every province of Italy have been put to work upon interviewing the owners and arranging for the entrance of foreigners. Among the four hundred villas there are many splendid examples which are wholly unknown to the Landscape architect."

"The Chairman of the Committee of Library, Professor George B. McClellan, is due here in two weeks. A list of all our art books has been prepared for him, and Professor Van Buren and Professor Frank are at work upon a report concerning the classical books. I am also pleased to report that the subject—cataloguing of the Library, for which Miss Agnes Carpenter contributed the necessary funds, is progressing satisfactorily.

"It is needless to say that the Fellows are delighted with the promised increase in the yearly stipends. The \$1,250 a year combined with the low cost of living at the Academy should permit the men to secure a comprehensive idea of classical art. Another increase which is not so pleasing has arisen in connection with the food question. The cost of living has taken a considerable jump in the last few months, with the results that food at the Academy is now costing our Fellows about 15% more than it did in September. The cost of lunch and dinner combined is now \$.50.

"Dr. Adolph Barkan has given \$50 for the library in general.

"Mr. W. Symmes Richardson, a member of the firm of McKim, Mead & White, last month purchased the Villa

Graziadei which is between the Main Building and the view of Rome. He has been in town for the last ten days making plans for the alterations of his villa and for an attractive planting scheme in which the ilex, stone pine, cypress and box hedge figure prominently.

"The Fellows gave a highly successful fancy dress ball in spite of the fact that it occurred on Friday the 13th. The students of the French, Spanish and English Academies turned out in force."

"Today Prof. Van Buren and his party of about twenty-five persons are at Corfu en route for Greece, after a successful ten days at Pompeii and Naples. At Pompeii Prof. Van Buren had no trouble in lecturing five hours a day. There has been a serious railroad strike in Greece, but from last accounts this is over, and in any case the party is to do most of its traveling in Greece in automobiles. Former Sculptor Jennewein is with the party, and so is Architect Borie of Philadelphia with whom Jennewein is working on the new Museum for Philadelphia.

"Prof. Frank is in Egypt at present; then he goes to Greece. Before leaving Rome he finished an interesting study of the two early temples of Castor and Pollux in the Roman Forum. He has worked out excellent reconstructions.

"We had one candidate in Rome in the competitions for the Prize of Rome, namely, Mr. Otto F. Cerny, candidate in Architecture.

"Former Painter Lascari is progressing splendidly with Mr. Blashfield's Mosaics for St. Matthews Church at Washington, D. C. The fourth and last pendentive is well advanced. Two Cardinals came to see the mosaics. Cardinal Bonzano, who lived in Washington eleven years, and Cardinal O'Connell of Boston who is in Rome with a party of pilgrims for the Holy Year.

"Col. George B. McClellan, Chairman of the Committee on Library, and Mr. Richardson, the former Librarian of Princeton University, have been at work for over two weeks upon the Library. They will probably report to the Board proposals for a number of radical reforms. Colonel and Mrs. McClellan have been over the studios, lunched with the staff and students, and given a lunch at the Concordia to the students.

"The publication of Volume V of the Memoirs is now assured, thanks to the generous gift of \$1,000 from Mrs. Avery Coonley, a Trustee of Vassar.

"In addition to the gift just mentioned the following have come in:

Mrs. A. J. Frantz, for the Library	\$ 250
Prof. Tenney Frank, book-plate for Library	10
Mr. James Hazen Hyde, Life Membership	1000
Mr. Fairfax Harrison, for the Library	250
Mrs. J. D. Pepin, for the Library	10
Miss Isabel A. Ballantine, for the Library	1000

The total for the month thus amounts to \$3520

"The Ward-Thrasher Memorial was unveiled by Mrs. Fletcher, the wife of our Ambassador, in the presence of H. E. Ambassador Fletcher, Col. and Mrs. McClellan, the staff, the student body, and such donors to the Academy as were in Rome.

"In digging the foundations for an addition to Mrs. W. Symmes Richardson's Villa, the workmen came upon some very fine walls of opus reticulatum at a depth of about twelve feet. According to Dr. Esther Van Daman, the best authority at the Academy upon such matters, the walls date from the time of Augustus and belong either to an important villa or a tomb."

From a letter by Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"The student forces at the Academy are still very much depleted. Prof. Lamond and all three of the fellows in musical composition are travelling. Camden, first year sculptor, has joined the Greek party. Douglas, first year architect, who has gone to Carthage on Prof. Kelsey's expedition, reports some difficulty in finding a promising site for actual excavation. He had made a trip to Dougga where the "Service des Antiquités" has been engaged upon some very fine excavations and has become interested in measuring up and reconstructing the temple of Celestis and the newly excavated baths there. The necessary permission from M. Poinsot, Director of the "Service des Antiquités" has been obtained. Marceau, senior architect, writes from Florence that he has abandoned the idea of

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doing the Boboli gardens in favor of the Villa Corsi Salviati at Sesto Fiorentino. He has found the owner of the Villa most cordial in giving him permission and has been offered by him a number of sources of information bearing on the original condition of the Villa, a careful restoration of which is being made by the present owner."

"Meyer, second year sculptor, is developing a Greek well head for his required relief. His fountain, which he has evolved about a legend of the American Indian, has been very much admired by Miss Ballantine, who hopes to find a place for it as a garden embellishment.

"We have just had reproduced the Houdin busts of Washington and Franklin in the Academy, which we are presenting to Ambassador Fletcher.

"We have registered this month, Irwin D. Hoffman, painter, on the Page Travelling Scholarship from the Boston Museum of Fine Arts."

\$100 PRIZE CONTEST OPEN.

THE C. F. Pease Company, 813-821 N. Franklin St., Chicago, Ill., is offering \$100 to the person submitting the slogan best adapted for promoting the use of blue prints accompanied by the best explanatory letter. This contest closes June 15, 1925, and all entries must be mailed before midnight of that date. Letters containing valuable sales hints for the blue print industry and all non-winners that can be used will be paid for at the rate of \$5.00 each.

UNIVERSITY OF ILLINOIS.

THE Grand Shah of Persia, his slave girls, street vendors, and tom tom beaters rioted in the New Year's festival, held March 20, in the gay bazaar of Persia, otherwise the Ricker Library of Architecture at the University of Illinois.

To weird music of the Orient, the procession wound its way among the street stands of merchants into the throne room, where the Grand Shah, Professor C. E. Palmer, was escorted to his throne. The bedouins came from the desert for the festival, the muezzins down from their minarets, the satraps from the court; and the Shah's favorites from the seraglio came in their brightest to mingle in the glory of the dance.

Every spring the students of the Department of Architecture spend a week in transforming the upper floors of the Engineering Hall into a bit of the Old Country for the fête, sponsored by the Architectural Society. Its members, and the students in the departments of Landscape, and Art and Design, and those in the School of Music are the only ones eligible for admittance. As this is the only large costume dance given on the campus, it is quite an event—and this one, the eighth, is considered by all to be the best ever given.

MARY THEYE WORTHEN,
Sec. of Architectural Society.

NEW YORK ARCHITECTURAL CLUB, INC.

A DESCRIPTIVE folder defining the aims and ambitions of this club, of which there are thousands of copies being distributed, as well as membership applications, may be obtained from Mr. George R. Paradies, Chairman Membership Committee of McKenzie, Voorhees & Gmelin, or Mr. Norman T. Valentine, Chairman Publicity Committee, of Starrett & Van Vleck. Official distributors are as follows:

- 1 Members of the Board of Directors
- 2 Any office represented in the Architectural Bowling League or Architectural Tennis Tournament
- 3 Pencil Points Press, 19 East 24th Street, N. Y. C.
- 4 Architects Samples Corporation, 101 Park Avenue, N. Y. C.

Several of the largest blue printers in the city as well as Dodge Reports have all offered their aid in our efforts to secure a maximum of circulation for our literature.

The extremely valuable offer of the Architects Samples Corporation at 101 Park Avenue, to make use of their attractive office as a temporary headquarters until a club house is available to us, has been accepted and their Mr. Nanckin will cheerfully dispense information regarding the club and the filling out of application cards. Mr. Nanckin's unusually attractive personality has made

him the firm friend of the thousands of draftsmen who have come in contact with him and it is with great pleasure that we welcome him as a member of our club.

Among the first batch of applications to be received we note the name of Major William F. Deegan, personal friend of the great Marshal Foch of France, Past State Commander of the American Legion and now connected with Starrett & Van Vleck, architects. Just another fact to confirm our assertion that the New York Architectural Club is going to be one of the strongest in the country.

Our first annual election was held Tuesday evening, April 7th with the following results:

Board of Directors.

For Three Years.

- | | | |
|---|--|----------------------|
| 1 | George A. Flanagan | Donn Barber |
| 2 | Edmund J. Burke..... | Andrew J. Thomas |
| 3 | Emile L. Capel..... | Alfred C. Bossom |
| 4 | Norman T. Valentine..... | Starrett & Van Vleck |
| 5 | George R. Paradies...McKenzie, Voorhees & Gmelin | |
| 6 | Morris L. J. Scheffer..... | Donn Barber |
| 7 | George B. Kayser..... | James Gamble Rogers |

For Two Years

- | | | |
|----|---------------------------|----------------------|
| 8 | Charles L. Elliott..... | Starrett & Van Vleck |
| 9 | Charles Hess..... | McKim Mead & White |
| 10 | Henry G. Poll..... | Cass Gilbert |
| 11 | Joseph A. Finegan..... | Starrett & Van Vleck |
| 12 | Lloyd H. Smith..... | Warren & Wetmore |
| 13 | Robert G. Heinerwald..... | Guilbert & Betelle |
| 14 | George Culhane..... | Robert D. Kohn |

For One Year

- | | | |
|----|--|--------------------|
| 15 | Norman W. McBurney....Peabody Wilson & Brown | |
| 16 | Edward Week..... | J. E. R. Carpenter |
| 17 | Donald M. Plum..... | Walker & Gillette |
| 18 | Elliott D. Thomas..... | Thomas W. Lamb |
| 19 | William M. Dowling..... | W. L. Stoddart |
| 20 | J. H. D. Williams..... | Delano & Aldrich |
| 21 | Charles B. Deer..... | Schultz & Weaver |

Officers.

- | | | |
|----|----------------------------|-------------------------|
| 1 | George A. Flanagan..... | President |
| 2 | Edmund J. Burke..... | 1st Vice President |
| 3 | Emile L. Capel..... | 2nd Vice President |
| 4 | Norman T. Valentine..... | 3rd Vice President |
| 5 | Norman W. McBurney..... | 4th Vice President |
| 6 | Morris L. J. Scheffer..... | 5th Vice President |
| 7 | George B. Kayser..... | Corresponding Secretary |
| 8 | Charles Hess..... | Recording Secretary |
| 9 | Lloyd H. Smith..... | Financial Secretary |
| 10 | Joseph A. Finegan..... | Treasurer |
| 11 | Edward Week..... | Sergeant-at-arms |

Committee Chairman

- | | |
|----------------------|----------------------|
| Norman T. Valentine, | Publicity Committee |
| George R. Paradies, | Membership Committee |
| Lloyd H. Smith, | Financial Committee |

The tennis tournament, with Mr. Flanagan as chairman, and the basketball teams under the direction of Mr. Scheffer, will function this summer practically the same as that season. It would be a physical impossibility to build up an athletic committee in the club to handle these two great activities in such a short space of time. As individuals however the majority of the players will become members of the club and by next year we all hope to see them playing on the club's own grounds.

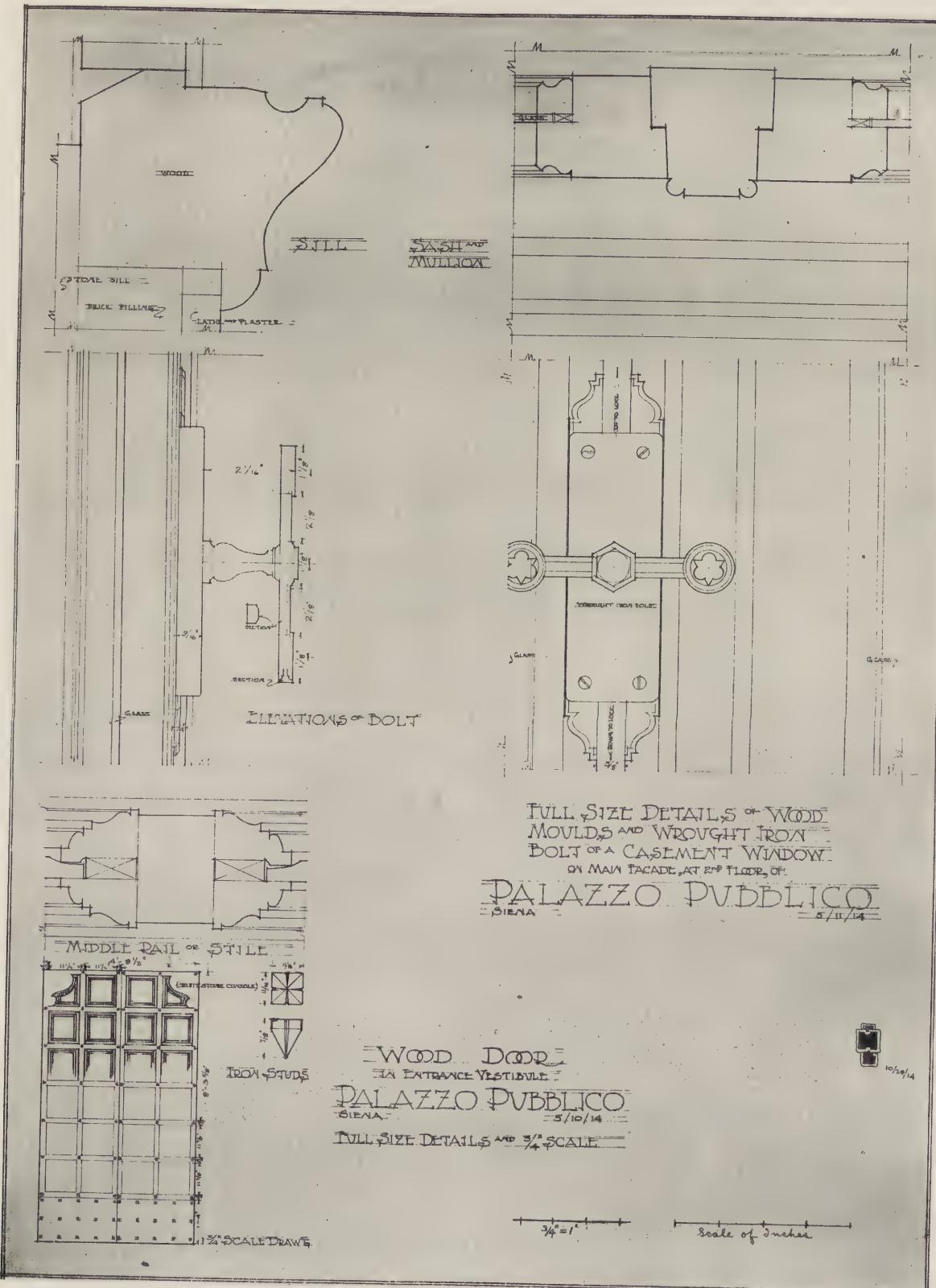
Bowling League Division.

The annual dance at the Ritz-Carleton will be down in history by the time this number of Pencil Points is issued and the stage will be all set for the great annual dinner at the Pershing Square Savarin, Wednesday, May 6th. Many of New York's greatest architects will be present to share with us in the joy and good fellowship of presenting the medals, banners and trophies, and to make short but stirring speeches in opening the great drive for members for the club.

Standing of teams, high score, high average, etc., for the three man tournament will appear in the June issue of PENCIL POINTS as it has not been possible to get all the data together in time for this number.

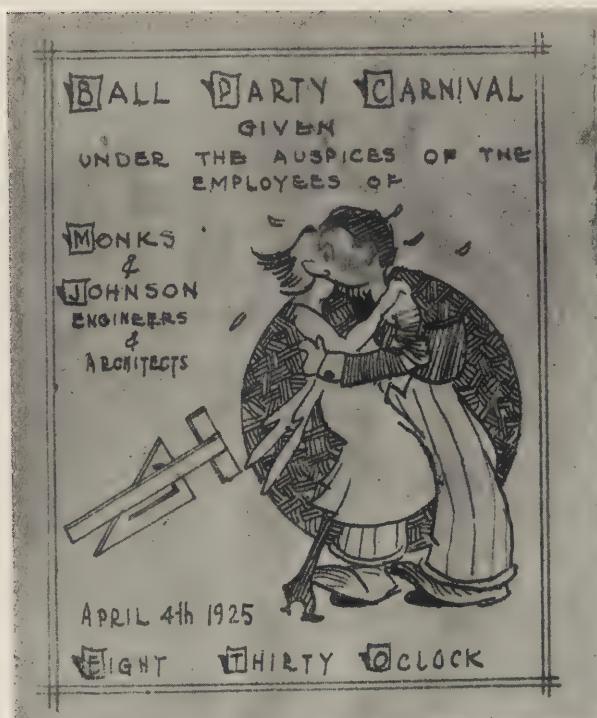
N. T. Valentine,
Secretary

PENCIL POINTS



Measured Drawings by Herbert Lippmann.

PENCIL POINTS



MONKS & JOHNSON COSTUME BALL AND DANCING PARTY.

THE officers and the employees of Monks & Johnson, Architects and Engineers of Boston, held a Costume Ball and Dancing Party in their offices on Saturday evening, April 4, the most elaborate and successful event ever held by this firm.

By the very clever and ingenious efforts of the firm's expert decorators, architects, and engineers, under the direction of William J. Stone of the Architectural Department, who is also one of the originators of the annual Harvard-Tech Fête Charette, the large drafting room was transformed into a veritable paradise. An Oriental palace was represented, beautifully decorated with luxurious tapestries and hangings, Chinese rugs, and flags. Bridge lamps were conveniently placed to further bring out the deep reds and blues of the rugs hung about the room; here and there was spread a dais, under which a lounge, heaped with gay-colored pillows, gave added comfort to the dancers; even the floor presented a whirlpool of color, picked out by the rainbow spot lights and further enriched by the reflections of silken and jeweled costumes, footwear, and headgear.

Real peppy music was supplied by Tucker's Orchestra, and several stunts were put on by talent within the organization.

During the intermission an unusually delicious buffet supper was served, which gave additional spirit and joy to the merry-makers.

AWARDS IN SMALL HOUSE COMPETITION

THE drawings submitted in the competition conducted for the United States Gypsum Company for a bungalow and for a small house have been judged by the following jury: Julian Peabody of Peabody, Wilson & Brown, New York, Chairman; Dwight James Baum, Riverdale, N. Y.; E. H. Brown of Hewitt & Brown, Minneapolis; F. Ellis Jackson of Jackson, Richardson and Adams, Providence, R. I.; and William T. Warren, Warren, Knight and Davis, Birmingham, Alabama.

The prize winners and those awarded mentions are as follows:

BUNGALOWS

1st Award \$500.00

Angelo De Sousa,
Berkeley, Cal.

John Floyd Yewell,
New York.

HOUSE

2nd Award \$300.00

Harrison Clarke,
Los Angeles, Cal.

Howard S. Richmond,
Los Angeles, Cal.

3rd Award \$200.00

Albert W. Ford,
Anaheim, Cal.

Howard R. Hutchinson,
New York.

4th Award \$100.00

P. Donald Horgan,
Chicago, Illinois.

Angus McD. McSweeney,
San Francisco, Cal.

Mentions

Will Rice Amon,
New York.

William A. Glasgow,
Los Angeles, Cal.

H. Ross Wiggs,
New York.

Wm. M. Stryker,
Los Angeles, Cal.

John J. Regan,
New York.

Bruce Rabenold,
New York.

W. Pell Pulis,
Boston, Mass.

R. M. Eskil,
Sacramento, Cal.

Harry Brodsky &
Hazel Slayton Brodsky,
Pleasantville, N. Y.

Elmer E. Nieman,
Colorado Springs,
Colorado.

Walter W. Wefferling,
New York.

Thomas B. Temple,
Chas. H. Koop,
New York.

Charles Mink,
New York.

C. W. Lemmon,
Los Angeles, Cal.

Fred H. Elswick,
Ashland, Kentucky.

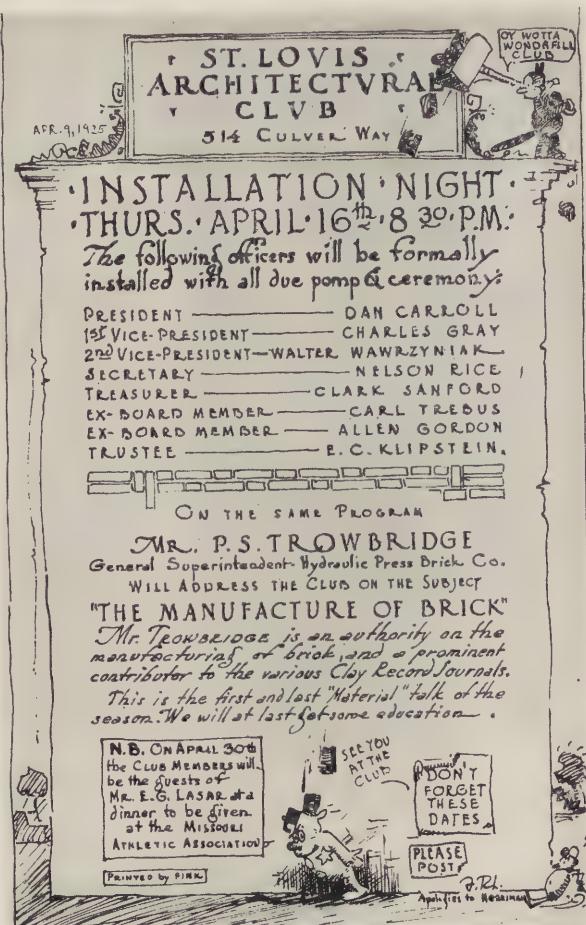
Daniel Neilinger,
New York.

A. B. Gallion,
Chicago, Ill.

Clarence Jahn,
Milwaukee, Wis.

Harry Brodsky &
Hazel Slayton Brodsky,
Pleasantville, N. Y.

Edward D. Pierre &
Richard E. Bishop,
Indianapolis, Indiana.



St. Louis Architectural Club Announcement of a Recent Meeting.

PENCIL POINTS

GORDON BRAINERD PIKE

IN THE death of Gordon Brainerd Pike, the architectural profession has suffered a great loss in the field of design and a charming and cultured gentleman has been taken from us.

Mr. Pike died suddenly at his home in New York, March 7, 1925, and was buried in Clinton, Conn., March 10, 1925. The funeral services, followed by impressive Masonic rites, were attended by the officers and staff of Starrett and Van Vleck, with whom Mr. Pike was associated at the time of his death.

Mr. Pike was born in Brooklyn, N. Y., November 6, 1865, the son of Robert Gordon and Mary Ellen Brainerd Pike. After his graduation from the Middletown, Conn., High School, Mr. Pike spent one year at Phillips Exeter Academy in New Hampshire, and one year at Wesleyan University, Middletown, Conn. He then entered the sophomore class at Yale University and was graduated in 1889. While at Yale he became famous as a football player.

From 1889 to 1891 Gordon Pike studied at the Massachusetts Institute of Technology and in the School of Mines, Columbia University. In the latter part of 1891, he went to Paris, spending three years there in the study of architecture, painting and life drawing. Two years of travel in the south of France and Italy followed, during which time he made numerous pencil sketches and water colors. Upon his return he worked and designed for many architects, among whom were McKim, Mead and White, Hoppin and Koen, Hiss and Weeks and Montague Flagg.

Mr. Pike was a lover of music as well as of architecture and was an accomplished cornetist. He was a member of the Psi Epsilon Society, a member of Kane Lodge, F. and A. M., and a member of the Architectural League of New York.

Mr. Pike's picture appears on page 98, in the group photograph of the office force of Starrett and Van Vleck.

ADDRESSES WANTED

ANYONE knowing the correct addresses of the following will confer a favor by sending them to this office. Pencil Points Press, Inc., 19 East 24th Street, New York City.

ALABAMA: John Barton, Birmingham.

CALIFORNIA: Wm. K. Graveley, Alhambra; R. M. Eskil and Winfield Hyde, Berkeley; Thos. E. Brockhouse, A. B. Crist, Everett R. Harman, Samuel P. Lipschitz, Armand Mathieu, William Peck, Los Angeles; Glenn M. Rogers, Pasadena; Hal S. Wilcox, San Mateo; Jack L. Williams, So. Pasadena; J. H. Garrison, Watts.

COLORADO: Carl F. Bieler, Marble.

CONNECTICUT: Percy L. Allen, Mortville; A. F. Kimbel, New Canaan; G. G. Bakon, W. R. Stone, New Haven; Wm. W. Dawson, Jr., So. Norwalk.

GEORGIA: L. G. Clark, Albany.

ILLINOIS: R. E. Halloway, Champaign; Marian Wilson, Emil Zumkeller-CFM, Chicago.

INDIANA: Kenneth Farmer, Bloomington; Stephen B. Allen, E. D. Van Frank, Indianapolis; Carl De Grau, Marion; G. W. Schmidt, Notre Dame.

KANSAS: Perry G. Means, Mound Valley.

LOUISIANA: Victor E. Johnson, Monroe.

MASSACHUSETTS: Wm. Power Blodget, C. S. Bolden, Samuel E. Lunden, Boston; H. E. Dickson, Cambridge.

MICHIGAN: J. A. Gordon, Norman F. Rearic, Ann Arbor; Harold B. Furlond, Detroit.

MINNESOTA: Ruphert Ward, S. C. Wong, Minneapolis.

NEBRASKA: C. G. Hrubesky, Lincoln.

NEW JERSEY: Paul B. West, Bellville.

NEW YORK: W. H. Deitrick, Jr., Brooklyn; Austides M. Agostino, John Aronson, Frederick E. Baldauf, Lester T. Hobbs, L. Percival Hutton, C. W. Macardell, Andrew Nendvitch, C. M. Schubert, Herbert F. Sobers, Ralph S. Twitchell, Thos. Morrison, New York City.

OHIO: F. W. Leimberger, Cincinnati; Herbert H. Blossom, Irwin I. Waller, Cleveland; Ernest Dux, Dayton.

PENNSYLVANIA: Benj. Franklin Betts, Philadelphia; P. C. Ruth, State College.

TENNESSEE: J. C. Valadie, Knoxville.

TEXAS: J. Donald Moffatt, Fort Stockton.

UTAH: Carl A. Larsen, Bountiful, Davis County.

WASHINGTON: Earl P. Newberry, Seattle.

WISCONSIN: William C. Ostermeyer, Milwaukee.

CANADA: J. M. Jefferey, H. E. Wilmott, Toronto.



CLARENCE W. HUNT

CLARENCE W. HUNT, winner of the Le Brun Traveling Scholarship Competition for 1925, was born in Ft. Wayne, Ind., in 1900, and obtained his early education in the public and high schools there. During the summers he worked in architectural offices and on part time for his last two years in high school. In the fall of 1918 he entered Carnegie Institute of Technology and was graduated in 1922 with a bachelor's degree in architecture. During his four years at Carnegie Tech, Mr. Hunt was awarded three scholarships and upon his graduation was presented with the medal of the American Institute of Architects for general excellence in architecture for the four years. After his graduation, Mr. Hunt entered the office of Henry Hornbostel in Pittsburgh. In August, 1923, he came to New York and entered the office of Raymond M. Hood, and later worked for John Russell Pope. At the present time Mr. Hunt is with Bertram Grosvenor Goodhue Associates. Mr. Hunt feels that he owes much to Mr. Hornbostel and Mr. Hood for their help and the inspiration derived from them. He will go abroad in the fall.

THIRD ANNUAL ARCHITECTS' GOLF TOURNAMENT

F. GRAHAM WILLIAMS BRICK COMPANY will hold their third annual Golf Tournament for the Architects of the Southeast at the East Lake Country Club, Atlanta, on Friday, May 15, 1925.

This Tournament is for all architects and draftsmen in the entire Southeast, and is a one day Tournament, eighteen hole, medal play, against par, with club handicaps applying.

Last year we had about seventy-five architects and draftsmen with us and we are expecting a much larger number this year.

The Southeastern Architects' championship cup was won last year by Mr. C. F. Hickman of Columbus, Georgia, and the draftsman's cup was won by Mr. Dan Clark of Atlanta, Georgia.

The enclosed leaflet will give full information, and the same rules will apply this year. Please note that the handicap committee will be changed to the following:

C. E. Frazier, Candler Building.....	Atlanta, Georgia
Leon LeGrande	Greenville, S. C.
P. S. Stevens, 101 Marietta Street	Atlanta, Georgia
C. F. Hickman	Columbus, Georgia
M. C. Kollock, Candler Building	Atlanta, Georgia
Henrik Wallin	Savannah, Georgia

PENCIL POINTS

PRODUCERS' RESEARCH COUNCIL

Address delivered by Mr. O. C. Harn, Chairman, at the annual meeting of the Council, Hotel Roosevelt, New York, April 20. This address is printed for the information both of the architectural profession, and those manufacturers who may not be familiar with the aims and objects of the Council.—EDITOR.

ONE of the outstanding facts about the conduct of business in the present period is the greater spirit of confidence and the actual co-operation among concerns operating in the same industry. This does not in any way mean the elimination of competition. It means simply that we have come to recognize that any industry which supplies a real public need has a responsibility as an industry and that in meeting that responsibility, there are many things which can be done better, more quickly and more economically by group action than through the units of the industry. Hence we find associations of similar business concerns working for simplification of styles and packages and standardization of practices.

In the Producers' Research Council affiliated with the American Institute of Architects we have a slightly different development and one which I believe is destined to become just as important as those more familiar co-operative movements to which I have just alluded. The idea behind the Producers' Research Council is even broader than the trade associations and recognizes the fact that responsibility to the public often crosses the lines of an industry and unites very closely the interests of those who might at first glance be considered as working in entirely different fields.

It is just as wise, it seems to me, for the architect who plans a building and the manufacturer who supplies the material for that building to understand each other as for two manufacturers in the same line to understand each other and co-operate. The architect and manufacturer are both working for the same client. If there is lost motion between them their common client suffers the loss.

If we assume that this fundamental conception is correct, efforts to bring the architect and the manufacturer closer together are even more justified than efforts to bring the manufacturers together, because there is more chance for misunderstanding between workers in different fields than between workers in the same fields. Manufacturers in the same line speak a common language. Their daily problems are the same. Architects have their own peculiar problems, their own language and their own points of view.

The difference is comparable to the difference between national and international relations. In the former we start with a common language, common ideals, a common training. As soon as two nations are called upon to act in accord, an entirely new set of conditions arise which require to be taken into account before agreement can be reached.

So it is when two groups as widely different in their functions as are architects and manufacturers attempt to get together for mutual benefit and for the benefit of their common clients, the public. Each must endeavor to learn the language of the other and the other's point of view. More important still is the necessity that each shall learn to lend his aid to the other in the best possible way. For each has his part to play in serving the common client. Neither can do the work of the other, yet neither can do his work without the other.

We manufacturers know of many examples of lost motion (which means money loss) by reason of exports to other countries being useless, or at least less useful than they might be, because the styles or sizes or packages sent are not in accordance with the desires of the natives. Exporters cannot see why a Chinaman should refuse an article which is blue and insist on red. But the Chinaman knows. Manufacturers of building materials who go ahead making things for incorporation in a building without first knowing how the architect is going to incorporate the material in his design make the same kind of a mistake. The manufacturer also makes a mistake when he contributes what he thinks is the best thing to meet a purpose without telling the architect how to use it. And this information should be given in the way and in the language in which the architect wants it told.

It is to find out all about these things, to learn how best these two great divisions of the building industry can work together that the Producers' Research Council has been formed. It is because the American Institute of Architects has recognized the great need for this closer co-operation

that the Council has been affiliated with the Institute.

The essential ideas of research are, on one hand to understand by careful and accurate study and observation just what takes place when certain things are done; and on the other, what are the inherent properties and qualities of the materials used. An architect with a mind trained to study and observation may learn the first; the manufacturer the second. The latter may be the better able to tell what modifications are possible; the former may with this knowledge suggest improvements in practice. Each, of course, tries to learn what he can of the other's business; but neither is likely to learn as much as the other knows. When they unite their knowledge, each feels a stimulus, each enjoys a benefit, and often each is diverted from trying what he might before have thought practicable, but which is in fact not promising of advantage.

The service which the members of the Council receives from the Scientific Research Department is predicated on the assumption that if the manufacturer is to do things as the architect wants him to do it, the architect must frankly tell the manufacturer how to do it. So we have a well organized service of which I trust every member of the Council will make full use. If you plan a new product or a revision of application consult the Scientific Research Department. If you are going to get out a specification, submit it first to the Scientific Research Department through Council headquarters. If you have an advertising plan, outline it first to the department. Get the committee's ideas as to the general idea and even as to the form of the advertisements, whether they are to go into periodicals or into mailing envelopes. It is better to know beforehand what is likely to be acceptable than to view with regret the ineffectiveness of a campaign costing thousands of dollars.

I hope also the Council members will co-operate with our committee on education in supplying for use at Institute chapter meetings lectures and motion pictures illustrating the use of building materials. It will not be true co-operation to try to make ordinary advertising films and sales talk meet the purpose. When architects spend an evening out of their busy week attending a chapter meeting to learn something, it is not fair to take their time with mere statements, in word or picture, that your product is the best on earth. Give facts, make it interesting, contribute something for the real good of our allies, the architects. This will prove to be better salesmanship in the end, even of your own product. Take the broad view.

There is a wonderful opportunity in this movement for mutual help. It is the leaders on both sides who will first see it and make the vision a reality.

PERSONALS

RUDOLPH P. MILLER, CONSULTING ENGINEER, has removed his offices to 324 Madison Avenue, New York City.

GERALD R. TYLER and F. EARL DE LOE have become associated for the practice of architecture under the firm name of DeLoe and Tyler, at Melbourne, Florida.

ELWIN P. & CHAS. E. NORBERG, ARCHITECTS, have removed their offices to 1144 So. Grand Avenue, Los Angeles, Calif.

LEON STILLMAN has opened an office for the practice of architecture at 311 Lenox Avenue, New York City.

STARRETT & VAN VLECK, ARCHITECTS, have removed their offices to 393 Seventh Avenue, New York City.

WM. E. BLOODGOOD, ARCHITECT, has removed his office to 29 West 34th St., New York City.

SAMUEL OGREN, ARCHITECT, has opened an office for the practice of architecture at the Masonic Building, Delray, Florida.

GRATIAN D. THOMPSON, ARCHITECT, has removed his office to 65 McGill College Avenue, Montreal, Canada.

WILLIAM SPENCER CROSBY, ARCHITECT AND ENGINEER, has removed his offices to 6 North Michigan Avenue, Chicago, Ill.

VOSS & LAURITZEN have dissolved partnership. Mr. Louis H. Voss is retiring after a partnership of twenty-five years standing. Mr. Lauritz Lauritzen will continue to practice at the same address, 308 Livingston St., Brooklyn, N. Y.

ALPHA ALPHA GAMMA, National Fraternity of Women Students of Architecture, Landscape Architecture and Interior Designing have founded Epsilon Chapter at the University of Illinois, Urbana, Illinois.

PENCIL POINTS

A LETTER FROM MR. ALEXANDER.

To the Editor of "Pencil Points"
Dear Sir:

Your article, "What Is the Answer?" in the April issue, I feel sure will bring you all kinds of results, and I judge that a large majority of them will be in the same trend as the one you published. May I add my ideas to those you receive?

As I look at the situation, the answer is somewhat the same as when we get through with a competition and hand the drawings in, we say "never again," but the next one comes along; we do it. Architecture, it seems to me, is one of the most fascinating of all professions, for it contains a certain element of personality not often found in any profession I know. It is clean, pleasing work, and when you stop to analyze the fact that you take a piece of lead and a piece of paper and put on this paper with the aid of this lead what is in your mind's eye, and then make that a reality, regardless of whether it is big or little, no one can deny that there is fascination and a great deal of enjoyment to be derived from this. There are few other professions, with the exception of Engineering, that offer this creative element.

On the other hand, like every other profession, Architecture has its distressing and dark side, and its disappointments are tremendous, but those are the things that make it all the more fascinating to the man who appreciates Architecture and the business of Architecture. But let me get off this question of Architecture, as I feel that the question involved is the draftsman.

The real draftsman, it seems to me, is capable of enjoying just exactly the same feelings as the architect. There is no doubt that the draftsman has his times when he is disappointed because he is not making more money, or because he feels that he is not able to enter architectural practice himself, but I think that a draftsman ought to stop and think for a minute and ask himself, "Don't you think the architect has the same feelings come over him? Isn't it after all a pure matter of your own personality?" Remember the architect is dependant upon you for your share of the work and the real draftsman should take a certain amount of enjoyment in the realization of this responsibility and do his best. The architect has more to worry about than the draftsman and if you don't believe this, ask some draftsman who has tried the game on his own hook.

The draftsman who wrote the article in your paper says that after twenty years of pencil pushing, as far as finances are concerned he is no better off, and he wonders where he will be in the next twenty years. My advice to him is to stop right where he is and go back over the twenty years that he has been pushing that pencil and take account of where he made his mistakes. Did he move too often? Did he ask too much salary? Was he really worth what he was getting? I would advise having a talk with his employer, and if he can't find any way to improve his standing, get out of the profession and go into something else. But before making a change my advice is to stop and think of all the others in his position in other professions. Think of the hundreds in Lord & Taylor's who will never be "Lords" or "Taylors."

Twenty years at drafting is a pretty long time, and a man during that time certainly should have something laid away, and if he hasn't it is his own fault. Don't blame it on the profession.

I disagree with him entirely in his statement that unless a young man has backing and influential friends in an architect's office, he can never be a success, because this is absolutely the wrong attitude for any man to take in any line of business. If a man thinks that he has to have backing and pushing, in any profession, to get anywhere, he never will get anywhere. The place he has to have the backing and the pushing is in his own little personality. He must have push enough and backbone enough to go out and get the backing and pushing of others to advance. Every man in the profession can be a success if he does everything that he attempts with the utmost that is in him.

Don't get sore because some friend or relative of the boss apparently has a better job than you. There may be good reasons for it, and put yourself in their positions for a moment and see if you wouldn't take the job if you had the same opportunity. Still, I don't mean this to apply to all cases as I know some that are too good to be true,

and in such cases I'd stay clear of them for my own good.

As for the young man starting in, I believe that parents would do well to let their children follow their own inclination when it comes to a profession. Of course a talk with them is advisable, but do not let the question of money or another's failure stand in the way of their ambition. My own experience bears me out; my parents wanted me to go into a bank, and I suppose if I had followed their wishes I should have been better off as far as looking at it the way this man looks at his condition is concerned, that is financially. I very likely would be riding around in a Rolls Royce by this time, but instead of that, as they did not insist, I was left alone and some way or other I drifted into an architect's office. I haven't even a Ford, and I am not making much of a salary, but I am happy, and I think the architectural profession today is one hundred per cent better than it was when I started, and for that reason no really enthusiastic young man should be discouraged from trying to be an architect.

As I stated that the profession is better, I certainly would never advise a man not to go into the architectural profession if his personality and feelings dictated an ability toward Architecture. Of course a man who enters the architectural profession should have a lot of grit, and never expect to be rich. He should have personality, and a load of tact, together with the determination to overcome all obstacles, and he will make a success.

The architectural profession today has a marvelous field, I think, for the future. Take this city alone, with the big buildings that are going up; the housing propositions; the opportunities offered draftsmen through competitions to get their names before the public, the good work done by your own paper, "Pencil Points," and all the other papers; the work the Institute is trying to do, the Architectural League; and the new club house for draftsmen, the Bowling League, tennis tournament, etc. All are for the benefit of the draftsman in the future. The public is being educated every way, more and more, to the value of an architect, and to use a commercial term, the draftsman's market today is completely exhausted. This office and many other offices have been looking for and are willing to take on good men, but they aren't to be had. In other words, on the average everybody's busy, and therefore everybody's happy.

This draftsman complains of thirty men being laid off on the job just before Christmas. Unfortunately the architect has this sometimes forced upon him by the client, and on the other hand sometimes that draftsman is the cause of his own laying off. He may know that an architect needs a man badly and he will take advantage of this and jack his salary up, and naturally be one of the first ones to be fired. Every draftsman will admit that when he hears of a job, the first thing he wants to learn is the salary.

So in summing up, some way or other I feel that the whole thing is a matter of personality. There are two sides to all questions, and the man who is continually feeling that he is never going to be a success and that everything is wrong will never get anywhere. I remember a statement I once heard Mr. Harvey Corbett, one of our foremost architects, make, at the Architectural League one night in discussing Socialism, in which he said that history had taught us that society and civilization as a whole was like a pyramid; there was always someone designated to be up at the top, and the other stratas worked all in their respective positions. If we would each one of us take the load that is put on us and bear it as best we can, we can't help but be successes. When the draftsman gets through with his day's work and is disappointed and disgusted with everything, just look down at the floor and think of the scrubwoman who is coming around at twelve o'clock that night to clean that room, and think how much better off you are after all.

Very truly yours,
Aaron G. Alexander.

A CORRECTION

IN THE March issue of PENCIL POINTS The Paine Lumber Co., Oshkosh, Wis., published in their advertisement an illustration of Alden Park Manor, Brookline, Mass. The name of the architect was given as K. M. de Vos & Co. The credit line should read K. M. de Vos & Co., Architects, Georges R. Wren and Harold Field Kellogg, Consulting Architects.

? ? ? ? ? ? ? ? ? ? ?

The communication from one of our readers, presented herewith, carries with it neither our approval nor disapproval of any of the comments made. It is presented as an interesting expression of individual opinion and it is hoped that those of our readers who with the writer will communicate their views for subsequent publication in PENCIL POINTS.—EDITOR.

THREE are so many "?"s in the practice of architecture and the work of drafting that no one can answer them all and few of us will agree in those we do answer.

But the two problems of "selling architecture" and the getting the most out of one's services as a draftsman are so nearly akin as to be really component parts of the same general proposition; which proposition has, by the way, innumerable phases.

Your correspondent who deplored the very use of the expression, "selling architecture," may be the fortunate possessor of a repeating clientele (of which there are mighty few) or he may be the equally lucky member of a social group which looks out for its own (of which there be quite a number).

Analysis of the causes contributing to the success of architects of the largest practice is quite impossible but would, if it could be effected, undoubtedly produce many surprises.

Probably one practicing in a hundred is able to amass a fortune through the sole medium of work acquired without solicitation or definite competitive effort.

What of the other ninety-and-nine?

One trouble with the majority of the best of us is simply that we are distinctly not good salesmen; just that. Many times we either do not get the commission at all or we take it at the client's figure when, if we could use the correct psychological effort, we need simply point to the dotted line. (Some tell us that's how it's done.)

So long as the citizens of a democratic republic or a republican democracy are brought up in the belief that each is as good and as competent as his neighbor, just so long will the majority of such citizenry deem themselves capable of selecting a doctor or lawyer or preacher or teacher or architect solely on personal judgment—fostering the ability of the candidate to sell his services. Hence the greater demand for salesmanship than for intrinsic ability.

The dire consequence is, perhaps, more noticeable in architecture because of the size of each single job and the resultant fee involved; and likewise because of the fact that each job subtends a new selection by a new committee, some of the members of which have not learned their lesson. (Some never learn it.)

Let us ignore, for the moment the private work assigned by single individuals which seems, year by year, to constitute a continually decreasing proportion of the work in the average office.

In ten successive cases where architects were recently chosen for school house designing in a certain western state, decision in each case was based on the size of the applicant's fee and the degree to which he was willing to lie about the size of the building he could produce for the appropriation.

Only in the eleventh instance was a real architect employed who asked the American Institute rate (twice that of each but one of his competitors) or was able to induce the committee to investigate his standing. One "judge" was heard to say: "Oh, never mind that. We're willing to assume that you're all architects. Show us what you can give us for the money."

And the next eight of such "competitions" of which record was kept went as did the first ten. Of the nineteen jobs, the eleventh was the only one that was built within the appropriation.

Query: Is a real architect in such surroundings to employ "selling methods" or quit?

The chances are he will be forced into selling his services but will leave the school house game to the novices and shysters, probably do likewise with the court houses and churches, and devote himself to private work, which is more susceptible to real ability and the favorable influence of past performances.

But is architecture itself holding its own? If not, why not?

Another big question with a multiplicity of answers, both ways.

If it is not, there are probably several good and sufficient reasons.

One is that same ever-prevalent American idea that each native-born son (or daughter) is a fairly competent individual, perfectly capable of planning almost anything. Every architect can recall a number of clients who "really planned every bit of it, myself, you know; just had the architect put it on paper for me." Of course, it wouldn't take much of an expert to "just put it on paper." Then why bother with an experienced and "expensive" architect?

Many architects are not expensive—as to first cost. There are the novice and the shyster and also, saddest to say, the man of real ability who feels that he must have the particular job in order to keep the wolf from the door; and, likewise, that other character of more or less ability who seeks to maintain a large organization and must needs keep it going.

One or more of these factors is always out to grab off a job (I tried to find a happier expression) at whatever fee is low enough to get it away from the other fellow. Is it any wonder that the public estimate of architects is none too high?

Is architecture a losing game? One practitioner in a growing town pointed to his three local competitors where he had formerly five. One would think he was to be congratulated upon his reduced competition, but not so. During the previous year a firm of New York contractors had planned and built the most expensive banking house in the city; a Chicago "engineering" company had planned and built two local industrial plants; a somewhat similar organization had financed, planned and built the best hotel in the city and followed it with an office building.

Each of these had cost more than if done by the best of the local architects, therefore the sole excuse for their having been executed as they were must have been good salesmanship on the part of someone. Investigation proved that was exactly what had happened. The visiting strangers had been better salesmen than the local architects and the supposedly hard-headed local business men and financiers "fell for it."

But, when we mention the novices who are competing for architectural business, we immediately come upon a class that is more or less to be reckoned with in every large city—namely, the regularly employed draftsmen who "take work on the side."

Why this practice should be condoned in some offices is more or less of a mystery, unless because it is a means of holding down salaries. But right here do the selling ability of the architect and that of his employee become very much one and the same problem.

The draftsman who uses his spare time posing as an architect (perhaps licensed to do so) may not consider himself a competitor of his employer or may not be so considered. Nevertheless the work he does is taken out of the hands of some other architect somewhere, presumably because of a lower fee. Now, every cut fee, no matter by whom offered, is just one additional hole in the sieve through which slips away so large a share of the proper emoluments of our profession.

Every time an architect or pseudo-architect refuses a commission which fails to carry a "living wage," he is obviously aiding a competitor in securing more nearly a proper recompense.

"Why don't advanced draftsmen draw better salaries?"

Possibly the foregoing has much to do with it. In a few offices they do draw good pay but, unfortunately, these are few. The fact remains that a man with twice the ability of a \$50 man will work for less than \$100 and one who is worth three times the \$50 person may consider himself lucky if he draws \$100. These salaries are probably not one-half what similar training and efficiency would bring in commercial fields. Added to this injustice, as has been pointed out by others, is the further misfortune that almost any man in an office who is getting \$75 or more a week is a shining mark when the slump comes and we simply drop him—or several of him.

But there is one branch of architecture where a nice income is always to be had and that is the much-tabooed "selling end" of the profession—or shall we say "business?"

PENCIL POINTS

While we might hesitate to offer a man as much as \$100 a week to act as designer or specification writer or foreman of the drafting room, yet we would not vacillate a moment in giving him that, plus a bonus, if he could be the means of keeping the office supplied with remunerative work. We'd probably offer such a man a partnership thinking to lose him if we didn't.

These are bald facts and none too pleasant to contemplate. They would seem to indicate that the most valuable function in an office is the facility for getting business, rather than the ability to turn out good architecture. In fact, it has been the saying of some in these titanic new engineering-construction octopuses that getting the business is the whole thing—that one can always buy high-class designers cheap.

It is this recognition of the relative importance of securing work that has enabled these concerns to segregate to themselves so large a proportion of high-class construction which had, until recent years, been considered the exclusive prerogative of the architect; and now lost to the latter because of his lack of salesmanship—or his refusal to use it. To complete the humiliation, these same construction corporations, having secured the work, may actually employ the high-minded ethical individual to design it. Thus we now find the architect working for the contractor instead of acting as his suzerain, as has been customary.

It has been remarked that, since the war, there has been a notable falling off in the average efficiency of draftsmen—that they are simply "not what they used to be" in those things which tend to make them most desirable in an office; knowledge, skill, interest, insight, rapidity, industry, loyalty, versatility, dependability, etc.

Whether or not this be so is an opinion to which each is entitled. If it be so, it is undoubtedly a contributing cause to the low average wage. Naturally, the varying degree of possession of the attributes enumerated will exert a direct effect upon a man's holding a job as well as its cash return to him.

Certain it is that, since the meteoric rise in wages in the building and other trades immediately after the war, individual industry among the younger element has been on the wane the country over. It is but natural that, if this is generally true in the so-called "laboring class," it must also be true in some degree in our offices.

Our draftsmen are only advanced mechanics working for less wages because the work is more attractive. (? ? ?)

This is not true, of course, but perhaps it is so nearly true that one can fit a rule of political economy to the problem—the law of supply and demand. If we are to ring in this old acquaintance, then we are at once face to face with that other fact that there is no record that anyone ever acquired a competence laboring at ease 40 hours a week. And few draftsmen can be accused of over-working in such period.

Is it not possible that we have become a soft bunch of "molly-coddles" and are being paid accordingly. How about returning to the he-man basis of our fore-bears—getting up at six (instead of seven-thirty or eight) and working until six at night—a good old-fashioned nine-hour day, six days in the week—and reaping the corresponding benefit? At two dollars an hour, that would increase a man's income from \$80 a week to \$108, perhaps just the increment he needs, and remove the necessity (and inclination) for that "something on the side" for which the average energetic man now keeps his eyes open—sometimes to the detriment of his regular task.

Probably this idea will get few votes but it has been proven that "you can't eat your cake and have it too." And it is also quite true that, when one of these enterprising draftsmen pounces upon that first big independent job that makes it possible for him to launch out for himself, we find him in his new office chasing out the cleaners in the morning and running up the light bills at night.

PARTICIPES CRIMINIS.

A COMMUNICATION FROM THE TULSA ARCHITECTS ASSOCIATION.

WE have long had a desire to speak out loud in behalf of the ordinary average architect who subsists upon the average sized building work, which consists of commercial and residential building which will run in cost from \$5,000 to \$15,000.

It is the men who do work in this class that constitute the

great numbers who are practicing the architectural profession, safely say 80%.

It has now become the custom of various manufacturers of both good and bad building commodities to advertise in various periodicals over the country that, for the small sum of from ten to fifty cents, they will send to any prospective builder not only a plan but a book full from cover to cover with many and various kinds of plans. Of course we all know that it is impossible to build from these plans, but the man who may become the architect's client does not know it, for the advertiser never makes such a statement although he is well aware of it, and it is merely a practice of subterfuge, promoting impractical application of his own product and stimulating hard times for Mr. Average Architect, whose good will and patronage he tries to cater to through all the architectural periodicals that the poor fish supports out of his own shallow pocket-book.

Some of these cut rate plan systems are advertising seemingly with the sanction of the A. I. A. and this is stressed upon to the fullest extent and, to the casual observer, puts Mr. Average Architect in the position of one who is out with the one single idea of starving to death, for does not his own greatest organization sanction the idea that plans should be had for small sums or a mere pittance compared with the enormous amount he wishes to charge his client and which seems in direct conflict with the very teachings of the great A. I. A., who should be his great guiding light, but who in fact are putting him in shackles.

There are numerous periodicals running so called plan service bureaus, printing in each issue a house plan which they will furnish to any reader for a sum way below any known architectural fee. All the reader has to do is to imagine that the building will suit his purpose, which of course it will not do in most cases, and then the local architect is presented with the picture and small scale plan to be made over, IF he will do it at the same price, which he cannot do. Therefore, in the eyes of the client, even after copious logical explanations, the architect must be crazy for he has read and knows that entire books of plans can be had for the sum of not over twenty-five cents and the A. I. A. advocates cheap plans, and nearly every magazine his wife buys also says that this is the case, so of course he cannot be wrong.

Some of these advertisers, after mentioning these various cheap prices on plans, suffer some sort of a pang of pain for they will insert in the advertisement, in an obscure sort of place, something about seeing your architect, but the damage has already been done and when he does see him the architect is merely in for more trouble by having to explain again the great reason *why*.

The hard part of it is this, every one publishing this kind of matter knows better than to do it and should come out truthfully and state why the architect should be patronized first hand in person and state the benefits of personal service and the benefits of a knowledge of local conditions and the benefits of having the owner's own individuality correctly enshrined in his own home, and many, many other reasons that cannot be stated here.

This great 80% of men in the architectural profession is likewise the 80% of all the subscribers to the various architectural magazines, all of which they like and, as a rule, they subscribe to more of them than they can afford. It would seem that it would be just and proper for these periodicals to reciprocate and to aid Mr. Average Architect, who for years has paid his good *hard earned* money to these various publications, and to take up the cudgels in his defense, for at the present rate of 80% of the subscribers will vanish into the great unknown and the only architects left will be the ones who design and plan the great structures and the twenty-five cent plan will reign supreme.

This communication has its origin from the discussion at a recent meeting of the Tulsa Architects' Association, following the reading of a letter published in the March 11th issue of the American Architect, page 218, written by H. Lucht and H. G. Anderson, architects, which we consider both appropriate and timely.

Yours truly,
H. H. MAHLER, President,
A. T. THORNE, Secretary,
W. D. BLACKER, Chairman,
Public Action Committee.

A discussion of this subject is invited.—EDITOR.

PENCIL POINTS

REPORT ON THE SUBWAY FLOORING

By HOBART UPJOHN

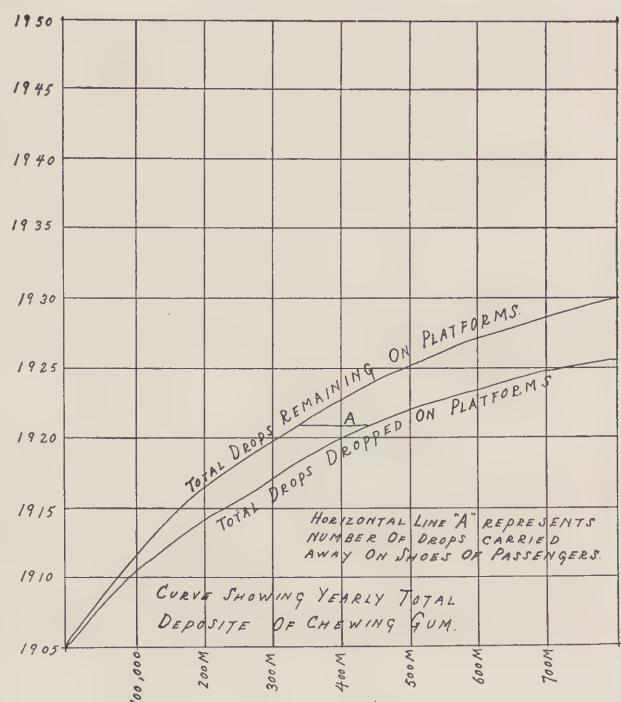
WHAT is to be the future flooring of our subway platforms and walks? The writer has given a great deal of time and thought to this subject, considering that its importance has been greatly neglected among the many researches which we are now making of our city and the trend of the city's growth. Many materials have been tried and tested. The non-slip tread, abrasive tiles, concrete and concrete hardeners, all have been tried and exhaustively tested, and the results are no doubt familiar to all. To those who have not data on the subject let us say there are many papers published by the Bureau of Standards in Washington and the Committee on Structural Service of the American Institute of Architects is endeavoring to tabulate, classify and bring up to date all available information on this subject.

The writer, however, has felt it his duty to investigate this subject more fully and at the greatest expense of time and trouble has collected the data embodied in this article, hoping to be able to place before the profession and future generations the importance of the subject, and with the wish that some benevolent body will take up the task and carry it to its logical conclusion.

For years the writer has noticed curious round spots appearing on the platforms and floors of subways. Upon closer examination these were found to be no less than chewing gum. The importance of the subject thrust itself on him and he decided to make a more thorough research and keep careful notes.

In 1910 a careful survey of ten square feet taken in three places on each of seventy-five subway platforms and passages of the Fourth Avenue Line revealed the fact that there were an average of two such spots to the square foot, averaging 2" in diameter. A careful record was kept, taking into account the variations of temperature through the month, with the following result.

Now the factories of the United States in 1921 were turning out 4,136,842,765 sticks of chewing gum taken in the aggregate per year; of this we can safely say that 275,876,292 sticks are masticated in New York and that 1,292,743 are chewed in the subway per year. Of these, 175,867 are parked under restaurant seats and tables, 156,



427 under arms of moving picture seats, 375,862 find their way to destruction, and 44,964 are disposed of by other methods, leaving a balance of 436,623 to be dropped on subway platforms.

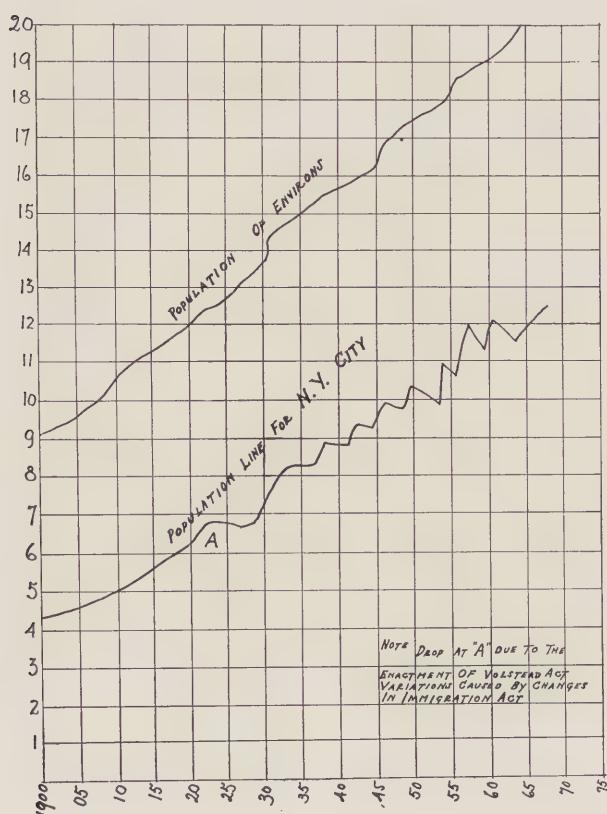
Going over careful tests made in the Columbia University laboratories, where it was found that the tenacity of gum for shoe leather was 24.3% as against 63.81% to concrete, the ideal being total adherence, we may safely figure that the number of gums dropped on the platforms, and which remain there, are as 63.81% is to 24.3%.

Now let us take the curve of growing population of New York. It has been estimated that in 1930 there will be 6,700,000 in our city and in 1960,—19,000,000 as is shown by the illustration at the left.

If now we find the ratio of users total to gum drops we see that in 1930, 10,764,869,722 will be deposited on the platforms, the yearly increase being approximately 500,000,000.

Now, forecasting results, taken against our observations from 1905 to the present day and shown by the illustration at the top of this column: There will be deposited on each square foot of subway surface, 857 gum drops per year in 1930, increasing to 3,726 in 1960. If now we assume the average thickness of a gum drop as $\frac{1}{8}$ inch, and if we calculate the sum of the yearly droppings, we find that each square foot will have not less than 37,468 per foot.

Assuming, then, a square foot will be covered evenly $\frac{1}{8}$ by 75 drops. This, divided into 37,468, we find the total thickness to be 500 layers, or 5' thickness. We may safely allow 50% for wear and tear, but the result shows conclusively that it will be necessary to raise the subway tracks and flatten the cars in order to take care of the rising of the level of the platforms, and it is strongly urged upon the officials and the Transit Commission that immediate steps be taken to have the necessary plans drawn.



UNIVERSITY OF LOUISVILLE

THE University Archi-Arts Society of the University of Louisville is making plans for a big banquet to end the season's work. Committees have been at work for some time in preparation for this event, and they promise a "corking" good time. We hope that all the architects of Louisville will keep on the watchout for invitations, and will inquire about them if they are not received.

ROBERT W. HUNN, JR., Sec.



WELL, as we have said somewhere else in the paper, we are five years old—or young—this month and are looking forward to the next five year period with the keenest interest and anticipation. Next month we expect to print a little notice regarding the future development of this department which we believe will have quite a kick in it—more than half of one per cent.

AS WE scamper to press this month—or maybe a "scurry" is a better word—it is borne in on us that these are hectic days. What with the A. I. A. Convention and the Exposition bringing lots of our friends to New York who have been kind enough to call upon us, and what with one thing or another, the month has slipped away and the printer is hollering for copy for this department and there isn't very much. Seems like all of our contributors have gone on a strike or gone fishing, which is just as bad so far as the Editor is concerned. We almost wish we had gone fishing ourselves!

THE fact that most people are honest offers to the man who is not, an opportunity to make a lot of trouble for a publisher and we regret to say that many prominent architects in England, as well as ourselves, have been victimized by a man representing himself as our agent, who has solicited subscriptions for PENCIL POINTS, collected and retained a sum of money in each case in excess of the subscription price and left a receipt which he had printed for the purpose. We find it necessary, therefore, to warn everybody not to pay any money to those representing themselves as our agents, unless the individuals are personally known to them. The recognized subscription agencies accept subscriptions for PENCIL POINTS as they do for all other periodicals, and we also have representatives in the schools and colleges. We have no traveling representatives whatsoever and any man so representing himself should not be dealt with. We have already heard from about thirty architects in England, calling our attention to this matter, and if there are any others, we hope they will communicate with us at once.

We reproduce a copy of the receipt mentioned above and sincerely regret the annoyance caused by the activities of this individual.

LOTS of people have written us nice letters about the April issue, but we are too modest to print them. We thank all these well-wishers just the same and shall hope to deserve half the nice things they say about us.

A LETTER FROM MR. MILLS.

Pencil Points,
Gentlemen:

I am going to tell you why I am not going to renew my subscription for PENCIL POINTS. Not because there is anything wrong about PENCIL POINTS but something decidedly wrong about the architectural profession.

I have been a subscriber ever since it first came into existence and there is not a better publication of its sort. Having graduated from one of the best schools in the country and followed the profession as draftsman, architect and instructor of drawing and design in New York and Boston since 1905, I can speak from experience that the architectural profession is not all that it should be. I am a renegade and have deserted the fold and gone into business, principally from disgust with the snobbishness and "I am a little tin God" attitude of some of the leading architects.

Boston is probably to blame and although I am a Massachusetts man, am not altogether proud of my native State.

What draftsman of ordinary spirit has not felt and rebelled inwardly (not outwardly, for fear of losing his job) against the snobbish attitude of the "big (?) boss" and the servile demeanor he has had to assume.

Most of the head draftsmen have been "good scouts", a buffer between the poor menials who are "hired only to be fired" and the "big boss" who, in many cases, hasn't the decency to say "good morning", even, to him.

Not all architects can be accused of this attitude. Some of them, principally the little ones, are white men. The last and one of the most decent I ever worked for, was one of them.

Experience and ability are not requisite for advancement but *pull*, social position and the school from which you graduated.

Architecture is a wonderful profession but the men at the top are not all of sufficiently large caliber to honor it and they are helped to hold their position by the little fellow behind the pencil, hunched over the drafting board, giving the best years of his life and enthusiasm and repaid by a small salary and an insecure position.

Yours very truly,
F. P. L. MILLS.

An Official Receipt from *Jay Paterson & Jones*
Coston-S. Mann
THE PENCIL POINTS PRESS, Inc.
19, East 24th Street,
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For the sum of £1 1 0 (twenty-one shillings) having been paid in advance
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Who will produce authority to collect monies on our behalf if so requested.

PENCIL POINTS

F. L. E. of Cass Gilbert's office breaks into verse as follows—he says the tune is "I'd Like To Be An Angel And With The Angels Stand":—

I'd like to be an artist
And with the artists stand,
Some wrinkles on my forehead,
Some charcoal in my hand.
Or with my 6 H pencil
And skilful hand so light
I'd make the nicest sketches
And burn them every night (perhaps).

ELIZABETH KIMBALL NEDVED, of Chicago, for her sketch reproduced on Page 100, wins the prize for the most interesting contribution to this department in the April issue. Looks as though draftsmen would have to sit up nights or form a union or something, to keep the girls from getting away with all the big events. They win the big sketch competition, and now they are apparently making a dead set for the laurels in this department.

HERE is a letter from the Architectural Society of the University of Kansas and we reproduce at the bottom of this page a picture of the members taken at their recent party.

Editor Here & There, etc.

Dear Sir:

We are enclosing a picture of the bloody K. U. architects taken on board the good ship "Architecture" during the plank-walking party given for the School of Fine Arts. First mate Goldwin Goldsmith reports a successful encounter. However, the increasing enrollment in the department will necessitate a larger ship if another pirate brawl is to be held.

The party was given by the department through a tradition established between the School of Fine Arts and the architects, each group being host every other year.

The spirit of our crew cannot be beat and we are out after all the prize "ships" of the year.

Yours very truly,

EUGENE C. BURKE,
Pres. Architectural Society.



Exhibition of Industrial Art at The Metropolitan Museum.

THE Metropolitan Museum's Ninth Annual Exhibition of American Industrial Art will be held from March 29 to May 3. The exhibition, which includes various types of home furnishings, furniture, rugs, tapestry, silverware, lace, textiles, porcelain, etc., was arranged under the direction of Richard F. Bach, Associate in Industrial Arts. The designs inspired by objects in the Museum indicate the extent to which the Museum is made useful to practical designers, an important feature of its work.

Clarence W. Brazer, 1133 Broadway, New York, wants a copy of the *White Pine Monograph, Vol. 2, No. 4.*

H. W. Iversen, 572 72nd St., Brooklyn, New York, has PENCIL POINTS complete for sale.

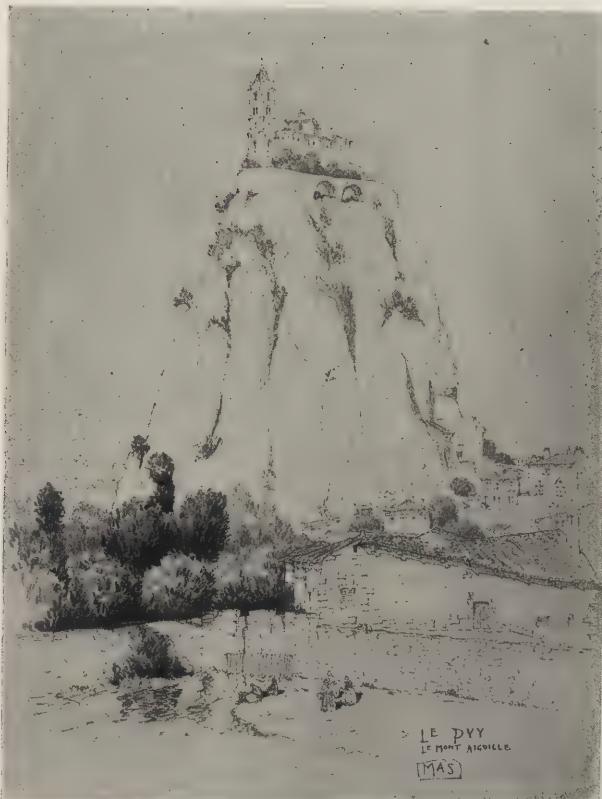
Reynold Grammer, Box 3299, Boston, Mass., has PENCIL POINTS complete for 1924 which he wishes to sell.

Wanted: Complete set, bound or unbound, of the White Pine Series of Architectural Monographs.
JOHN C. EHRLICH, 528 West 111th St., Apt. 26, N. Y. C.

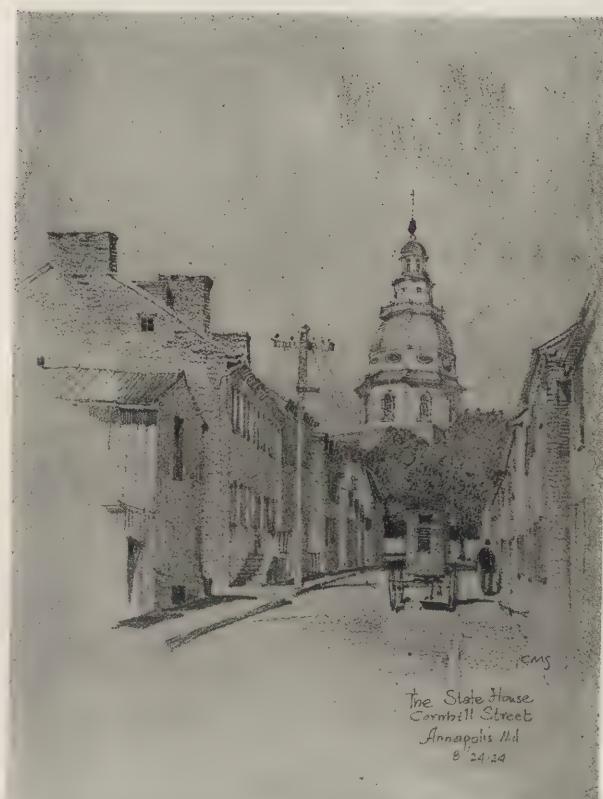


Party Given for the School of Fine Arts, University of Kansas.

PENCIL POINTS



By Meade A. Spencer, New York City.



By Charles Morse Stots, Pittsburgh, Pa.



By Paul Bobinal.



By Gerald K. Geerling, New York City.



The Drafting Room Force of Starrett & Van Vleck, Architects, New York City.

1. W. Whetler; 2. W. Embach; 3. S. Parkinson; 4. W. C. Busse; 5. N. T. Valentine; 6. R. M. McDonald; 7. J. N. Litt; 8. J. Burnell; 9. H. I. Cornell; 10. T. Adkins; 11. W. H. Head; 12. F. Cruess; 13. J. H. Ingle; 14. J. H. Hanlon; 15. J. H. Roe; 16. H. Wittekind; 17. C. L. Elliott; 18. W. A. Peterson; 19. R. Bonner; 20. E. F. Keating; 21. T. H. Moran; 22. H. P. Hollingshead; 23. G. Hyde; 24. W. P. Mitchell; 25. J. Veeelak, Jr.; 26. J. S. Keenan; 27. S. M. Palm; 28. W. P. Littleenstein; 29. N. J. Oland; 30. G. F. De Zeller; 31. C. H. Henke; 32. W. E. Delahanty; 33. F. J. Meseke; 34. A. H. Howland; 35. A. S. Ellis; 36. H. H. Bond; 37. J. W. Cromwell, Jr.; 38. B. F. Stanton; 39. E. Carson; 40. R. Schraedel; 41. G. B. Pike; 42. A. J. Russell; 43. G. A. Rackell; 44. R. Douglass; 45. Miss M. L. Simkins; 46. Miss R. E. Amatano; 47. C. W. Fettscher; 48. A. C. Youngson; 49. J. J. Murphy.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS
By W. W. BEACH

VII.

STANDARDIZING SPECIFICATIONS.

AT THE back of the head of every architect who has had much to do with the writing of specifications lurks the hope, more or less well-defined, that some day he will have the blamed stuff in such shape as to call it standardized, have it printed, and let the office-boy compile it for each job. But "it simply isn't being done."

The fact that architects of regular practice do not have standard specifications, after the thousands of attempts at such compilation, is fairly good evidence of its impracticability. Perhaps it's too Utopian a proposition even to hope for.

"Standardization spells stagnation" has been well said. One can no more turn out the varied work of a general practice with standard specifications than he can with standard drawings.

An architect seldom desires to repeat himself, even if given the opportunity.

Nevertheless, there are many high-class offices where the majority of the work is of a certain type, perhaps two or three types; schools or churches or office buildings or apartments or hotels or industrial plants; and there may easily be enough of any one of these in the year's output of a fair-sized office to warrant an attempt at standardization.

The form of specification we have been discussing lends itself more readily than any other to such partial standardizing for the reason that the sections of a division descriptive of materials and workmanship can be made constant for all structures of a given type, leaving only the title pages and the "General Descriptions" to be varied to suit the exigencies of the different jobs.

One can, to be sure, proceed further and have standard form pages for the majority of items entering into construction, such pages designed to be assembled to form the specification desired. But there is serious question as to whether or not this is worth the effort. In order to get value out of printing, one should not order less than 500 of each page. Keeping in stock that quantity of several hundred standard pages would tax the storage capacity of any but the very largest organizations.

Furthermore, some pages would be used in all specifications, others in few—and each would be revised from time to time (or continued in use after they should be revised). Yet, in the charge of a capable compiler, such a scheme might prove feasible and is perhaps in use somewhere at the present time.

For this purpose the page size $8\frac{1}{2}'' \times 5\frac{1}{2}''$ (half the size of a letter-head) is suggested, to be bound at one end. These should be printed with typewriter letter-face and the filler sheets done on machine to match. This size is handy for contractor and superintendent to carry in their coat pockets, thus facilitating the finding of the document on the job.

Some subjects will not require more than one of these short pages. Those which do can be printed both sides to reduce the bulk of the whole, an important consideration.

This treatment can be applied to the truly standard specifications for semi-standard buildings, those which constitute the major output in which a large organization specializes.

But, in the average office, one's time is spent to better advantage in building up specification forms which can be variously combined and altered to produce a proper specification for the particular kind of building in hand, rather than in attempting to so standardize the entire specification as to warrant the use of printed pages for other than the general conditions.

These latter should, however, be in stock in two or three forms suitable for both large and small contracts and for remodelings. To this end, we shall present in future installments a complete form of general conditions for new work and one for alterations; also an abbreviated form for small jobs.

CASEMENT AND STORM SASH VENTILATION.
(Concluded)

By Otto Gaertner

A MORE economical sash ventilator than the metal one last described, is a wooden one made to take the place of a light of glass. It may be made either to swing or to slide; the latter requiring no hardware. Ordinarily doors and sash which are much higher than their width are difficult to slide because they bind at the top and bottom. This small sash, however, being very light and the shape and size of an ordinary light of glass in a twelve light sash, will be found to slide very readily. It slides sidewise and is placed on the inside of the sash. The ventilating sash may be made slightly heavier if it closes against a stile of the window sash and is made to slide by one muntin only instead of being placed between two panes of glass.

Thus only one muntin is weakened and any jarring done by slamming the ventilating sash shut is taken up by the large sash stile and not by a muntin. Vertically, this ventilating sash will fit between two muntins. These two muntins are provided with rabbets on the inside the same as the glass and putty rabbets on the outside. Then a small stop is fastened to the muntins on the inside edge to take up half the width of the inside rabbets to form grooves of the outer half of the inside rabbets. The stop forming the lower groove should be slightly higher than the glass line of the muntin so that if water should accumulate in the lower groove it will be able to run outward and not inward. The stop forming the upper groove should be flushed with the glass line of the muntin. Both stops must extend not only across the space of the light of glass which the ventilating sash is to replace, but must also extend across the adjacent one where the sash will slide when it is opened. The top and bottom edges of the ventilating sash are rabbeted so that one edge of the rabbet will fit and slide in the grooves and the other will slide on the stops forming the grooves.

Since the one stile of the ventilating sash must slide by a vertical muntin, the inside of this muntin must be cut off on a line with the outside of the grooves formed in the horizontal muntins above and below. When the ventilating sash is closed one of its stiles overlaps this muntin. The edge of this stile may be moulded so that it will conform to the moulded profile of the muntin opposite it at the adjacent pane of glass when the ventilating sash is closed.

The other stile of the ventilating sash is rabbeted to fit into a groove the same as the top and bottom rails. The groove is formed in the same way as the others but it is made at least one quarter of an inch further back from the glass line of the stile of the window sash so that the stile of the ventilating sash may be made wider than the top and bottom rails without showing a wider margin on the outside of the window. The margin may be made three quarters of an inch wide all around but if possible the bottom rail of the ventilating sash may be made a little wider to strengthen it, the bottom margin showing that much more.

The thickness of the ventilating sash is made the same as the width of the rabbet formed on the inside of the window so that the ventilating sash will be flush with the window sash on the room side. The ventilating sash has a glass rabbet into which the glass and putty are placed in the usual manner but owing to the thickness of this sash there are no mouldings inside the glass rabbet and the glass rabbet must not be made too deep, otherwise the frail member forming the rabbet may be broken off before the sash is glazed. It is well to use as light and as thin a glass as possible so as to permit the use of more putty.

No hardware is required as the sash is opened or closed by pressing the fingers against the edges of the stiles at the glass. A ventilating sash such as this has been successfully made in a one and three eighth inch thick window sash and if carefully made could be provided for thinner sash also. It would be well to strengthen the corners of the ventilating sash in either case with small brass angles screwed at the corners. In narrow

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windows a modification of this scheme could be made so that the ventilating sash could be made to slide upward, provided suitable hardware is used to hold it open. Care must be taken not to let the sash fall when it is released and therefore it is not so fool proof as the other scheme. The sash can not be made to slide downward as it will not be water-tight at the bottom when it is closed. There is no apparent reason why a single piece of heavy plate glass can not be substituted in place of the horizontally sliding ventilating sash if it is made of the same size and with smooth polished edges. It would have to have a finger grip ground into it near one edge, care being taken not to have it ground in too deeply and in such a way as to be inconspicuous from the outside.

It is also possible to have a wooden ventilating sash made to swing out and set in the glass rabbet of one of the panes of glass. Such a sash should be more rigid than the sliding type and if the glass rabbet is not sufficiently wide for this it may be necessary to project beyond it either on the inside or on the outside. The difficulty in the latter case arises when placing the hinges, if the ventilating sash is rabbeted to overlap the adjacent surfaces of the muntins and stiles. Such an overlap is not possible on the hinged stile of the ventilating sash. The better method is to keep the ventilating sash flush with the window sash on the outside and thicken the former by extending it on the inside after eliminating some members of the moulding on the inside of the muntins, thus forming a wider surface against which to fit the rabbeted edges of the ventilating sash.

The glazing would be done as in the sliding type of sash. The hinges should be screwed to a stile of the window sash if possible rather than to a muntin. Some kind of a small brass sash adjuster should be provided to hold the sash in place when it is open, and some type of holdfast should be provided to hold it closed when it is shut. The exact detail of the ventilating sash must be worked out to suit the conditions to be met in the project, such as sash thicknesses, mouldings, glass thickness, appearance, glass size to be closed, and so forth.

It may be well to specify that the ventilating sash are made of close grained hardwood for strength, and if the rabbet is too small to hold enough putty for proper glazing small hardwood mouldings needed in putty may be used on the outside to hold the glass in place. Such glass mouldings should never be used on the inside of sash. If water should be driven into the rabbet from the outside it is sure to find its way inside whereas if the moulding is placed on the outside, there is a solid rabbet which will not permit the water to go inside. It will follow the edges of the moulding and pass away on the outside.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing the publication. When writing for any of these items please mention PENCIL POINTS.

Decorative Linoleum Floors.—Large folio with fourteen color plates presenting artistic scheme of decoration and furnishing for every room in the house. Furniture, both antique and modern, has been combined with suitable draperies, wall and floor coverings to create pleasing effects. Armstrong Cork Co., Lancaster, Pa.

Architectural Terra Cotta.—Attractive brochure presenting illustrations of a variety of buildings of many types, together with 9 full page plates showing details of ornament and construction. 8½ x 11 in. Corning Terra Cotta Company, Corning, N. Y.

Structolite Homes.—Booklet containing blueprints and complete information with test data and specifications covering Structolite as applied to residence construction. 16 pp. 8½ x 11. United States Gypsum Company, 205 West Monroe Street, Chicago.

Metal Weatherstrip Details.—Looseleaf portfolio with strong binder containing 48 pages of drawings and specification data on weather strips for all types of service. 8½ x 11 in. Chamberlin Metal Weather Strip Co., Detroit.

Alpha Aids.—No. 41 of this series presents among other material a bungalow designed by William Draper Brinckloe, Architect. Perspective, elevations and plans are well presented. Alpha Portland Cement Co., Easton, Pa.

The Charm of Slate Floors and Walks.—Brochure in sepia on the subject indicated with illustrations, specifications, drawings showing patterns, etc. A. I. A. Filing Size No. 22B2. 8½ x 11 in. National Slate Association, 791 Drexel Bldg, Philadelphia, Pa.

Cork Pipe Covering.—Specification folder. A. I. A. Classification 37B6. Covering specifications for the insulation of brine, ammonia, carbon dioxide, sulphur dioxide, ethyl chloride, ice water and other refrigerating lines and tanks. This specification folder is accompanied by another booklet containing much data covering the same subject. Armstrong Cork and Insulation Co., Pittsburgh, Pa.

House Heating with Oil Fuel.—Compiled by P. E. Fandler. Handbook on the subject. 60 pp. 8½ x 11 in. Heating and Ventilating Magazine Co., 1123 Broadway, New York City. Price \$1.00.

Ruud Automatic Gas Water Heaters.—Publication No. 860. New publication covering subject with all information for the specification writer presented in convenient and non-technical form. 40 pp. 8½ x 11 in. Ruud Manufacturing Co., Pittsburgh, Pa.

Specifications for Damp-proofing, Water-proofing and Enameling and Technical Painting.—These specifications cover all phases of the subject indicated and are presented for the convenience of the specification writer. 56 pp. 8½ x 11 in. Toch Brothers, Inc., 110 East 42nd St., New York City.

Published by the same firm: A series of attractive folders prepared especially to give information to the busy man on a wide variety of matters pertaining to protective paints, damp-proof coatings, cement and mortar colors, etc. Ask for complete set of literature for architects.

Book of Fireplaces, 3rd Edition.—Very attractive and practical book covering fireplace construction, flues, etc., as well as presenting designs of the fireplaces themselves. 24 pp. 8½ x 11 in. The Donley Brothers Co., 13933 Miles Ave., Cleveland, Ohio.

Spandrel-tite.—New Booklet dealing with a new method of damp-proofing, drawings, details, sections and complete information. 8½ x 11. Structural Waterproofing Co., 126 East 59th Street, New York City.

Furnace Pipe and Fittings.—Catalog No. 25. Covers subject indicated completely, including registers and many accessories. 56 pp. 8½ x 11. Milwaukee Corrugating Company, Milwaukee, Wis.

Doorways.—Monthly publication, the April issue of which contains an interesting article on drapery suggestions for windows. Richards-Wilcox Mfg. Co., Aurora, Illinois.

Atlantic Terra Cotta.—Monthly publication for architects and draftsmen. Vol. 7, No. 8 illustrates the Entrance, presenting full page plates and details of ornament. Atlantic Terra Cotta Company, 350 Madison Avenue, New York City.

Artists' Materials. Catalog F.—Illustrates and describes complete line of everything required in the drafting room. 132 pp. B. K. Elliott Co., 126 Sixth Street, Pittsburgh, Pa.

Building Economy.—Monthly publication. March issue dealing with brick vs frame costs and containing working drawings of small bungalow. Common Brick Manufacturers' Assn., 2121 Guarantee Title Bldg., Cleveland, Ohio.

Bridgeport Data Book No. 16.—Contains interesting data on a wide range of brass products. Tables of use to the engineer and specification writer. 48 pp. Convenient pocket size. Bridgeport Brass Co., Bridgeport, Conn.

The Evanston Soundproof Door.—New Edition. Covers construction with many details, drawings, specification data, etc. 8½ x 11. Irving Hamlin, 1822 Sherman Ave., Evanston, Ill.

The Right Angle.—Monthly publication. Issue for March contains interesting data with drawings on ceiling construction, the application of corner beads, etc. General Fireproofing Co., Youngstown, Ohio.

Exhaust Fans.—Bulletin No. 140. Covers equipment of use in the chemical laboratory and all places from which corrosive fumes must be removed. Standard filing size. Duriron Co., Dayton, Ohio.

Real Roofing.—Attractive booklet dealing with modern types of roofs with an interesting chapter on climate as affecting roofs. Copper and Brass Research Association, 25 Broadway, New York City.

Esco Flooring.—Specification portfolio. A. I. A. File No. 19E9. Contains the essential information on ESSCO Heart Flooring. Exchange Sawmills Sales Co., R. A. Long Bldg., Kansas City, Mo.

Linoleum Data Book.—A. I. A. reference No. 28-I-1. Portfolio containing complete specifications including color samples, instructions for laying, etc. Standard Filing Size Congoleum-Nairn, Inc., 1421 Chestnut St., Philadelphia, Pa.

White Lilly.—Booklet on subject of Hydrated Lime for building uses. Woodville Lime Products Co., 632 Madison Ave., Toledo, Ohio.

Published by the same firm. Similar booklets entitled "White Enamel Finishing Lime" and "Gold Medal," another brand.

'PENCIL POINTS'

VOLUME VI

JUNE 1925

NUMBER 6

THE ARCHITECT'S OPPORTUNITY

EVERYONE who is connected with architectural work today has a part in the solution of the biggest and most interesting problems that ever called for the exercise of the architect's ability. The rapid and revolutionary changes brought about by progress in all departments of life—in the sciences, in business and in social views—call for expression in the architecture of the times. This affords an unparalleled opportunity for the application of all the architect may possess of reasoning power, of knowledge of the traditions of the art, of the power to create beauty in the terms of architecture.

While the styles of the past developed slowly, the architecture of today must develop rapidly to keep pace with the progress in all other lines of endeavor. This means that the architect must reason more clearly and soundly than the architects of the past have reasoned and while holding fast all that is good in the traditions, develop a new architecture.

As a result we find a great hospital built on the plan of a maltese cross, a great office building that is literally a "Cathedral of Business" and now a Cathedral of Learning has been designed for Pittsburgh; logical solutions of present day problems in which the right use has been made of the style characteristics of historic architecture. In the design of these buildings there is no severing of the line of historic development, there is no willful attempt to do "something different". These buildings are different from everything else only because they represent a logical solution of the problem in each case. That is the kind of architecture that is needed, the kind that commands the highest respect and that will be regarded as worthy by posterity, because it is a true and scholarly expression.

It is inspiring to study these buildings, to realize the living character of the architecture of the day and to appreciate the mastery with which many of the best architects are handling modern problems.

Though the big buildings afford the most striking examples, the buildings of moderate size and the small homes present problems that are just as modern and that require just as logical solution.

The architect who takes up each problem earnestly and with the will to handle it in a strong way is contributing his share to the world's work. The architect who holds himself aloof, deplored the insistence of clients upon modern requirements

and a proper return on the investment is simply eliminating himself. The architect who sees nothing but the practical requirements and, through either ignorance of good architectural traditions or the belief that "anything is good enough", produces unbeautiful buildings injures the standing of the profession in general. He also is eliminating himself for unless the architect can design buildings that are better and more pleasing to look upon than those built without the employment of an architect, he has no reason for being.

But every building needs an architect because there must be a master, a man who conceives the thing as a whole and in detail, who organizes and correlates all the elements and trades, with a broad knowledge and a broad vision, and a firm directing hand.

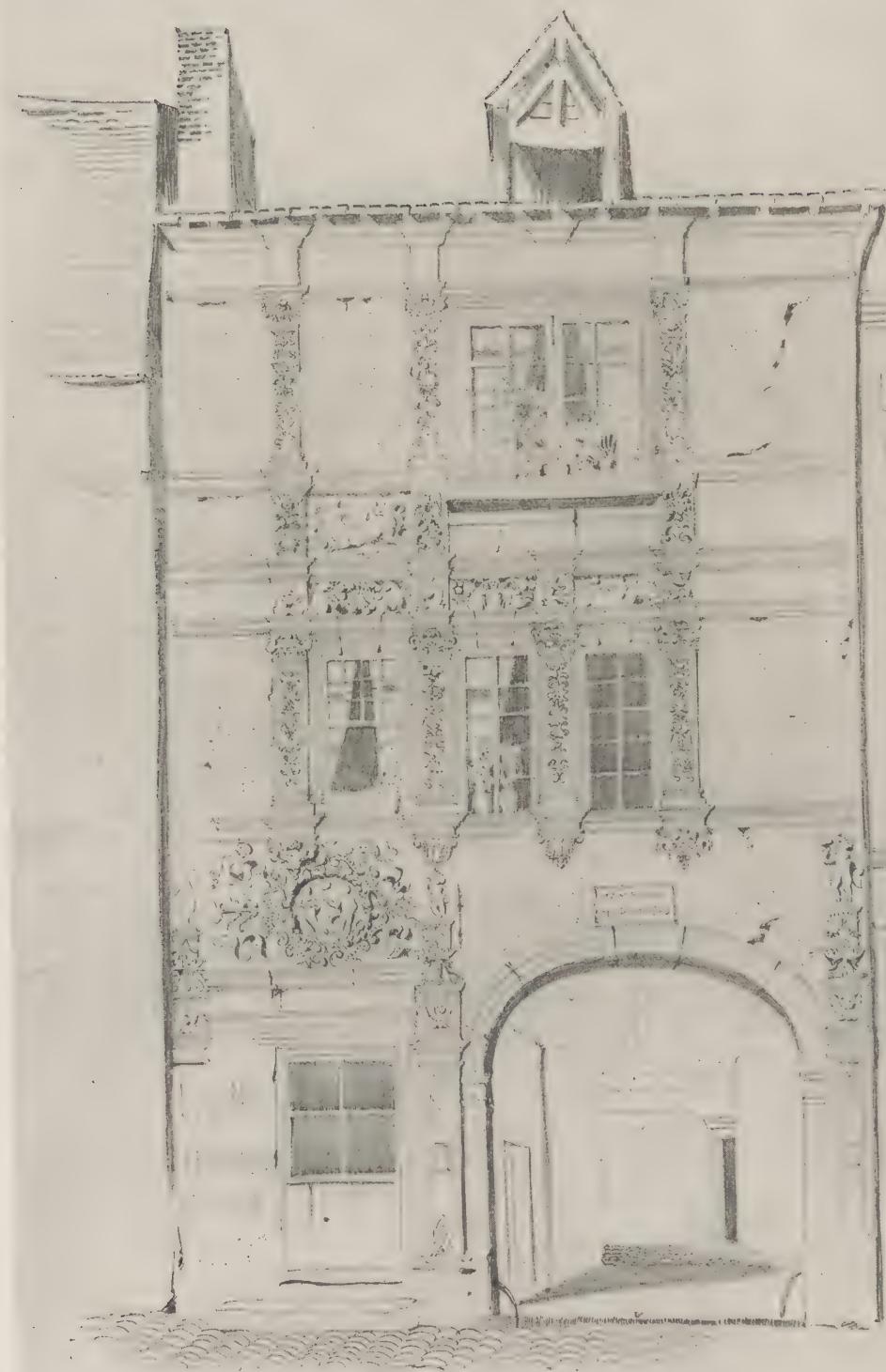
And the opportunity presented to the younger men of the profession, the drafting-room force considered broadly, is probably greater today than ever before. The new and rapidly changing conditions in the whole building industry offer, as never before, opportunities for the man of outstanding ability or for the man of *average* ability who will apply himself in meeting the new problems, effecting economies in time and money, working out new combinations of materials to achieve the results sought for, etc.

Much has been said in these columns about the future which the men in subordinate capacities may look forward to. Out of the present situation will emerge a certain number of men who will have taken long strides in advance in a comparatively short time. These men, by studying hard and working hard, will fit themselves for bigger things during the years to come. There are always difficulties in the way of progress. To dream a big dream is not always enough. Together with the vision must come the fullest exercise of the talents we possess and, above all, the willingness really to work hard.

The thorough study of architectural design is even more important than it was in the past for the meeting of new conditions in new ways calls for a mastery of the big principles of design, an appreciation of the essentials of beauty and a sureness never before needed to so great a degree.

The opportunity is great, the means of grasping it are at hand, study and work and a genuine desire to render service.

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Pencil Drawing by Albert Kahn. Grande Rue, Le Mans.

MASTER DRAFTSMEN, XII

ALBERT KAHN

THAT such matters as being an artist, skilled draftsman, and traveling scholar are not necessarily impediments to remarkable success as a business man, organizer, producer and salesman of his product, is well illustrated in the case of Albert Kahn.

Few architects have built up such a large practice or one comprising such varied uses of buildings; and fewer still of those, with reputations as designers, have exercised the necessary energy required to carry architecture into new fields, or old ones such as had been held exclusively by the so-called engineers and "practical" men. Mr. Kahn has done so much "missionary work" in the field of industrial building design, in its planning for efficiency of operation as well as its improved appearance, that his reputation in that special branch of his work has tended to obscure his accomplishments in other respects.

During the past score of years he has built up a practice which, for volume, has probably been as great as any in the United States and from the business point of view tells its own story. But business success in professional architecture does not mean very much as a rule. Some of the largest of such practices have produced so very little work that can be properly described as architecture that we cease to think of the name of the head of such "business" as an architect, but classify him as a business man, then compare him with the men at the head of *big* business—the "Jim" Hills, Pierpont Morgans and Andrew Carnegies, and his "reputation" with Wrigley and Fiske, whose names appear on the signs in electric lights. By such comparison he is relatively "nothing at all". In the case of the architect who, due to the character and style of his work, achieves such a volume of work that he finds the necessity of utilizing all that business system can accomplish to relieve him of everything that anybody else can do as well as he, yet reserves to himself the guidance of the designing, we find ourselves in a different attitude. From the interest in his work develops

readily an interest in its producer—for he is a human being who can do something besides turn the handle of a money-making machine. Business success with him is a matter incidental to a more interesting purpose. Much as Mr. Kahn has done in raising the standard of intelligence in the design of industrial buildings, I believe his reputation as an architect would have been greater, rather than less, had he been limited by different circumstances to the designing of residences and such buildings of the more intimate natures, which call forth the powers to charm.

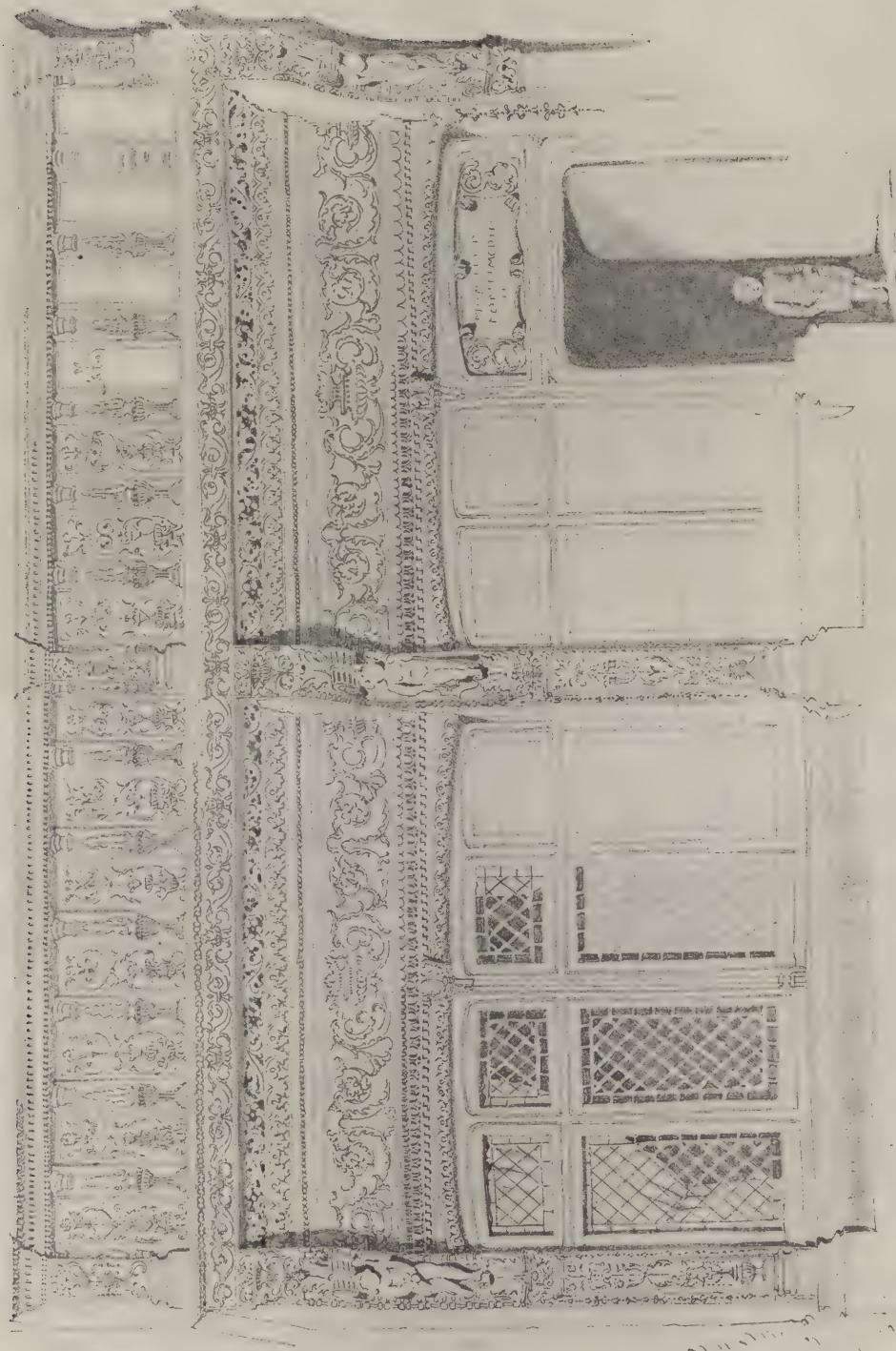
Before the days of the great development of the automobile industry at Detroit, Kahn used to design many houses, small and of moderate size, that were full of the quality and quaintness of the old things that are found in the highways and by-ways of Normandy, Nuremberg and the small places in England. He showed a love of excellent ornament and a fine discrimination in its employment, with a happy style of introducing a very little of it at some telling point in the composition. Not so many things were made by machinery in those days as now. The architect used to detail, full-size, all of the bits of carving and wrought iron



Albert Kahn.

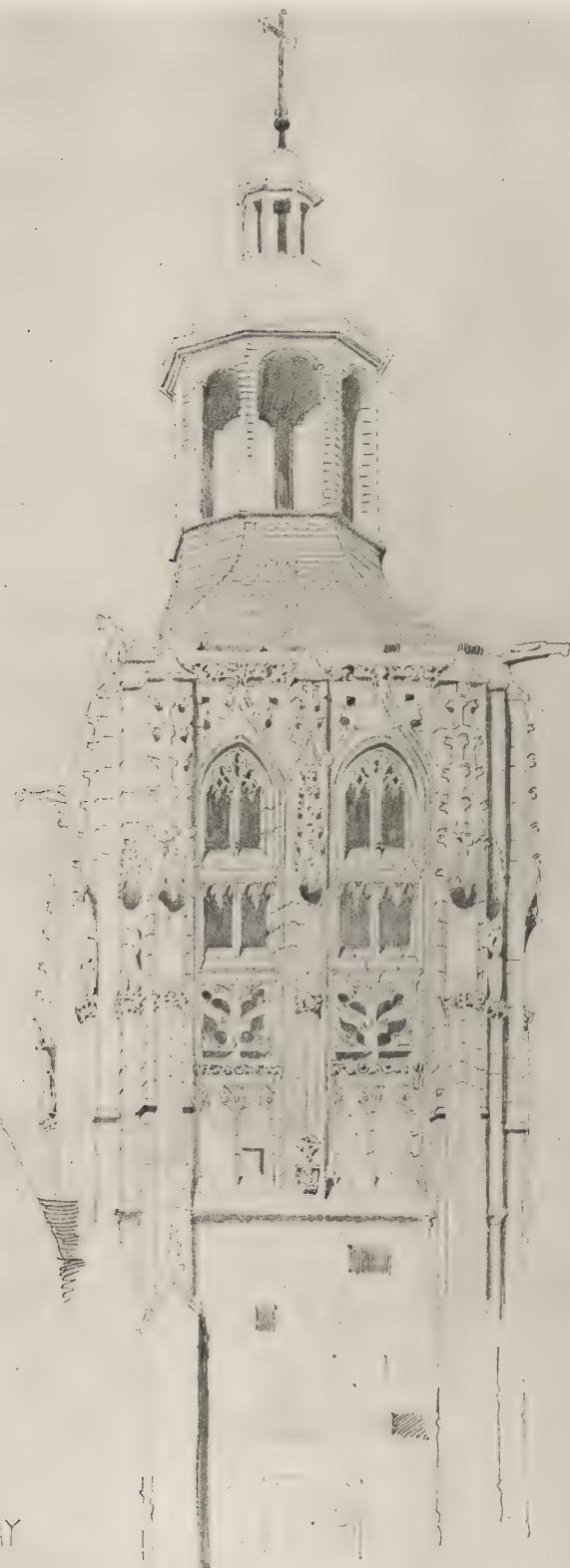
which were given a great deal of individuality (now lost in the use of stock models and rolled shapes). Kahn was a master designer and draftsman of such minor but important detail, and his drawings were worth looking at, more than once. In the office of Mr. George D. Mason, where Kahn grew from a young draftsman to chief designer, I ran across many of his little preliminary sketches which told of his growth. Some of the earlier examples followed the style of J. Willard Adams and W. E. Pasco—both of whom had worked in the same office and contributed, each, his share of individuality. But after Mr. Kahn's visit to Europe in 1890-91, where he went as "The American Architect Traveling Scholar", he came back to Detroit with a fully developed style of his own, which simply increased in facility as he went on.

(Continued on page 58)



Pencil Drawing by Albert Kahn. Tours.

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SAINTE-CROIX BERNAY

OCT. 23. 1891.

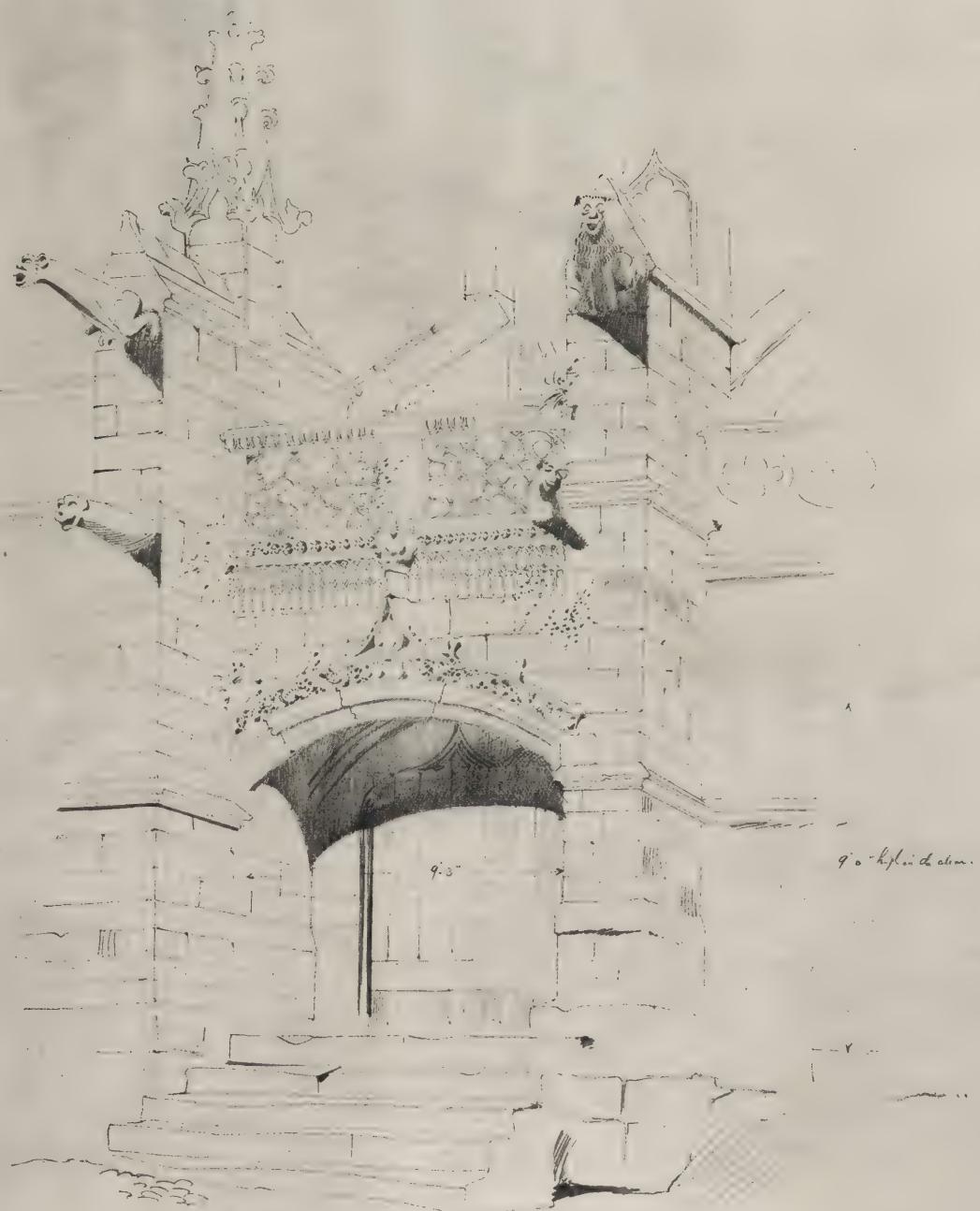
Pencil Drawing by Albert Kahn. Sainte-Croix, Bernay.

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Pencil Drawing by Albert Kahn. Hildesheim.

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Caen Oct. 18th 1891

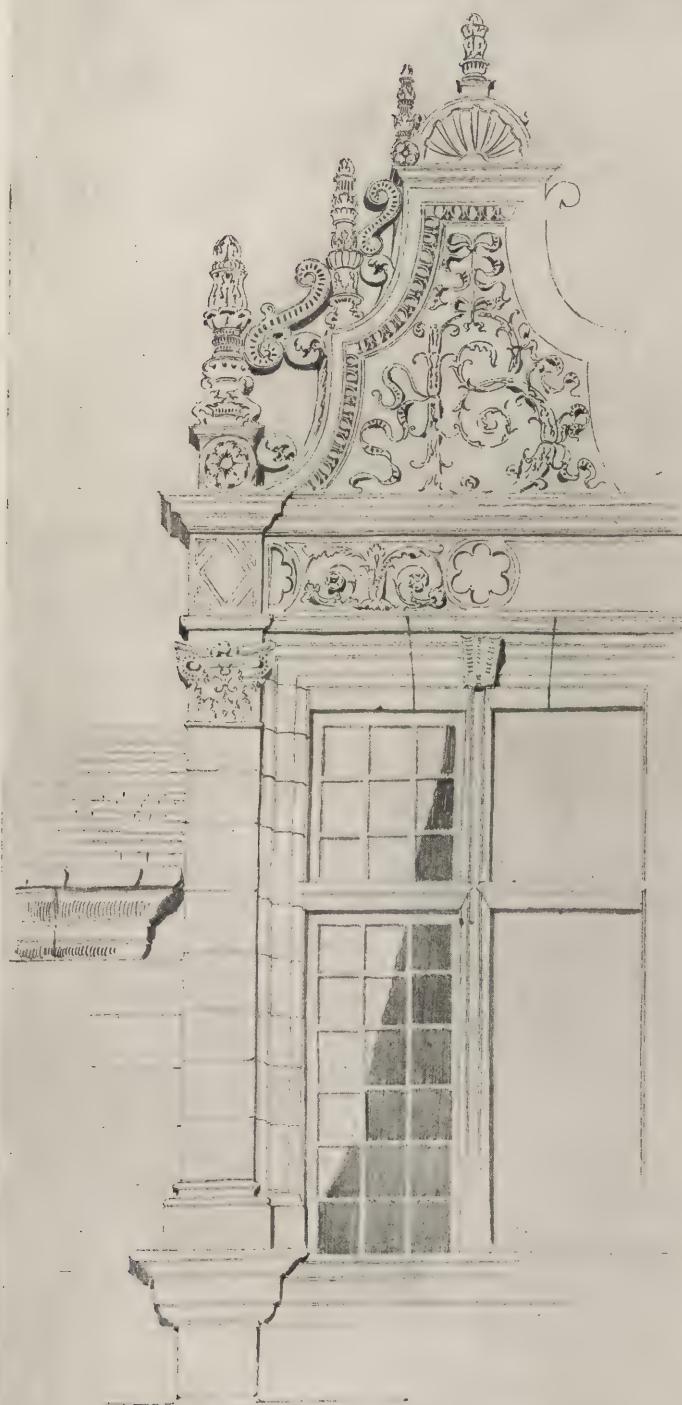
Pencil Drawing by Albert Kahn. Caen.

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Pencil Drawing by Albert Kahn. House in Braunschweig, Germany.

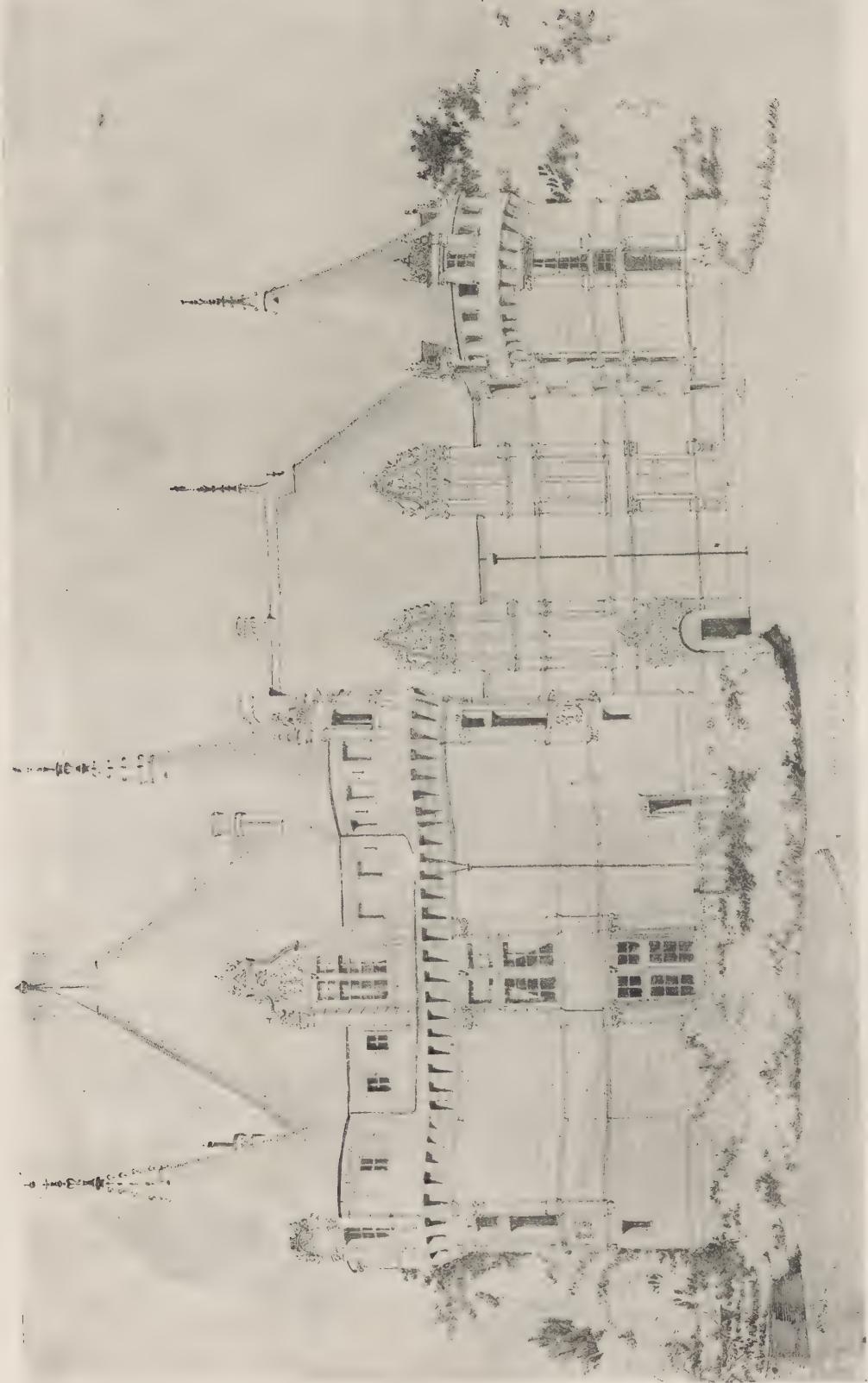
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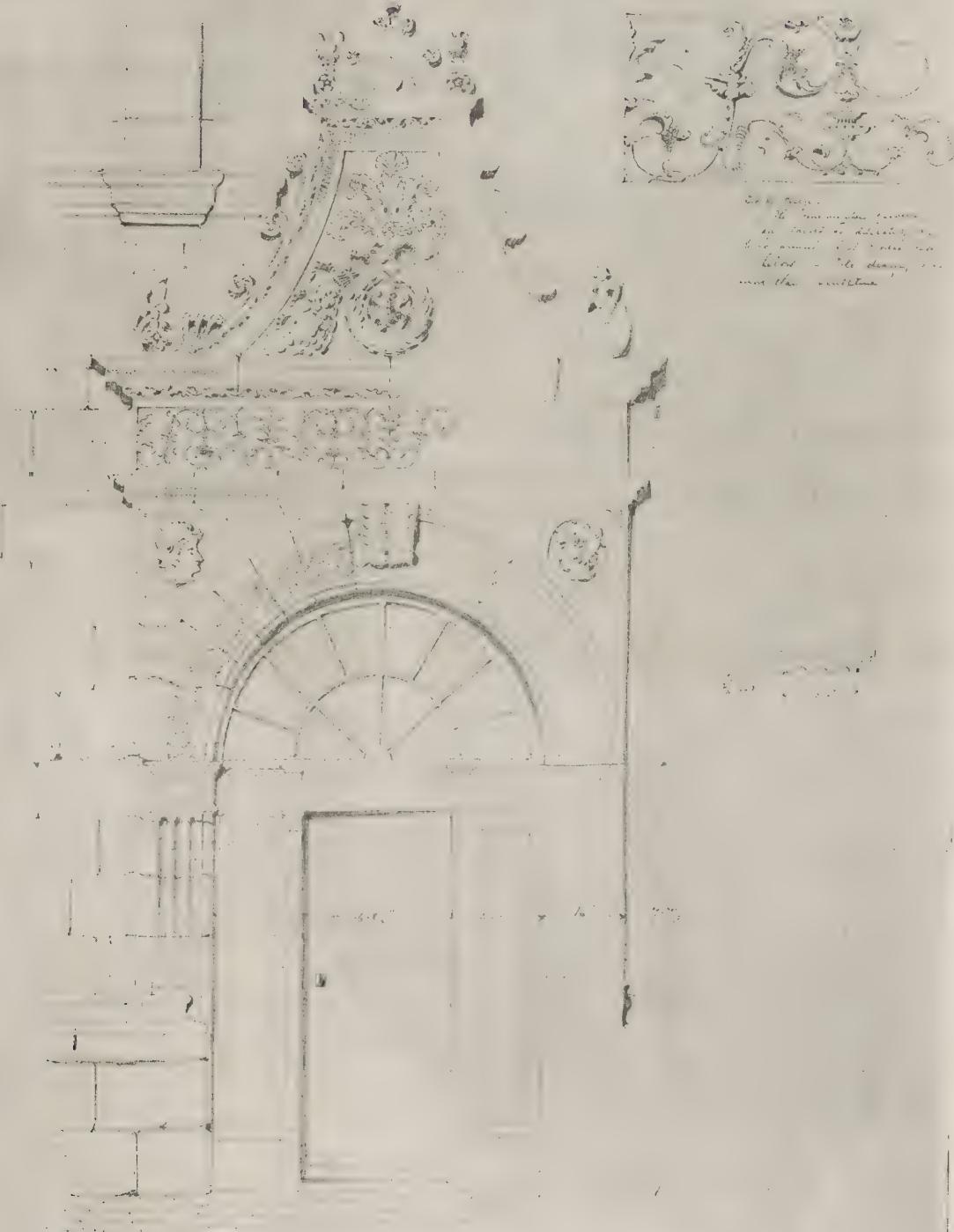
Azay-le-Rideau Sept 25th 1891.

Pencil Drawing by Albert Kahn. Azay-le-Rideau.

Pencil Drawing by Albert Kahn. Azay-le-Rideau.



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Pencil Drawing by Albert Kahn. Azay-le-Rideau—Kitchen Entrance to Château.

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Pencil Drawing by Albert Kahn, Cluny Museum, Paris.

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ST. GERMAIN DES PRÉS

Pencil Drawing by Albert Kahn. *St. Germain des Près.*

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Pencil Drawing by Albert Kahn. Cunault.

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CHARTRES
8-17 24

Pencil Drawing by Albert Kahn, Chartres.

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Pencil Drawing by Albert Kahn. Tetzel hof, Nürnberg.

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Pencil Drawing by Albert Kahn. Palazzo del Comune, Pistoia.

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The European sketches originally made for "The American Architect" show Mr. Kahn's style of draftsmanship in its first full development. They are a remarkable set of sketches in several respects. They are the work of a very young man, having been made when he was twenty to twenty-one years of age, and until he met Henry Bacon during his travel had been without instruction more than such guidance as comes to the young fellow in the office who starts as office boy. They are purely architectural records, faithfully and brilliantly made, without dependance upon entourage of foliage, figures, etc., for their interesting qualities. Then they are not "one-eyed"—they do not look like photographs, or copies from photos, but have the scale of sketches made in the open air (and how seldom we see such!—Any editor of an architectural paper can tell).

There are always difficulties in the way of making such sketches. One of Kahn's sketches bears a note, "1040 kids around and several big ones". On the point of difficulties to the sketcher, some conversation once took place between the late Evarts Tracy, Egerton Swartwout, W. Marbury Somerville and the writer, arising from my complaint that some process work seemed a necessary preliminary to getting anything more than a detail or rough composition before something would happen to prevent

its completion—such as "kids", rain, "cops" or curious bystanders. While agreement was general, Somerville spoke of Kahn. "I remember meeting Albert Kahn and Henry Bacon somewhere in northern France. Kahn said he was going to sketch the cathedral and we bet him he couldn't get anything in the time between trains. We looked around the town and when we got back found him sitting on the curb stone with a corking good drawing all finished in an hour."

As I had seen Mr. Kahn at work I knew the end of the story as soon as his name was mentioned. He draws very quickly and with an accurate sense of form and proportion. In several of his sketches the horizon line is taken a couple of feet lower than I would see it—which may be easily accounted for if he sat on the curbstone!. But in several of his perspective drawings of projects the same curious characteristic of the horizon being taken at about four feet above the base line occurs, thus exaggerating the scale. This observation may seem to have no point to readers who have found places to make their sketches from a camp-stool and who think of a building as they see it when seated in front of it; but I always visualize a building as I see it while standing or walking, and my horizon line is up nearly six feet from the ground. One

(Continued on page 84)



Pencil Drawing by Albert Kahn. Arch of Titus, Rome.

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PLATE XXI



DRAWING BY CHESTER B. PRICE
THE BARCLAY-VESEY TELEPHONE BUILDING. Mc KENZIE, VOORHEES
AND GMELIN, ARCHITECTS, NEW YORK.

On the other side of this sheet is reproduced a pencil drawing by Chester B. Price that is both an interesting example of technique and the representation of a design that is a modern solution of a present-day problem, which is an example of masterly designing on the part of the architects.

PENCIL POINTS

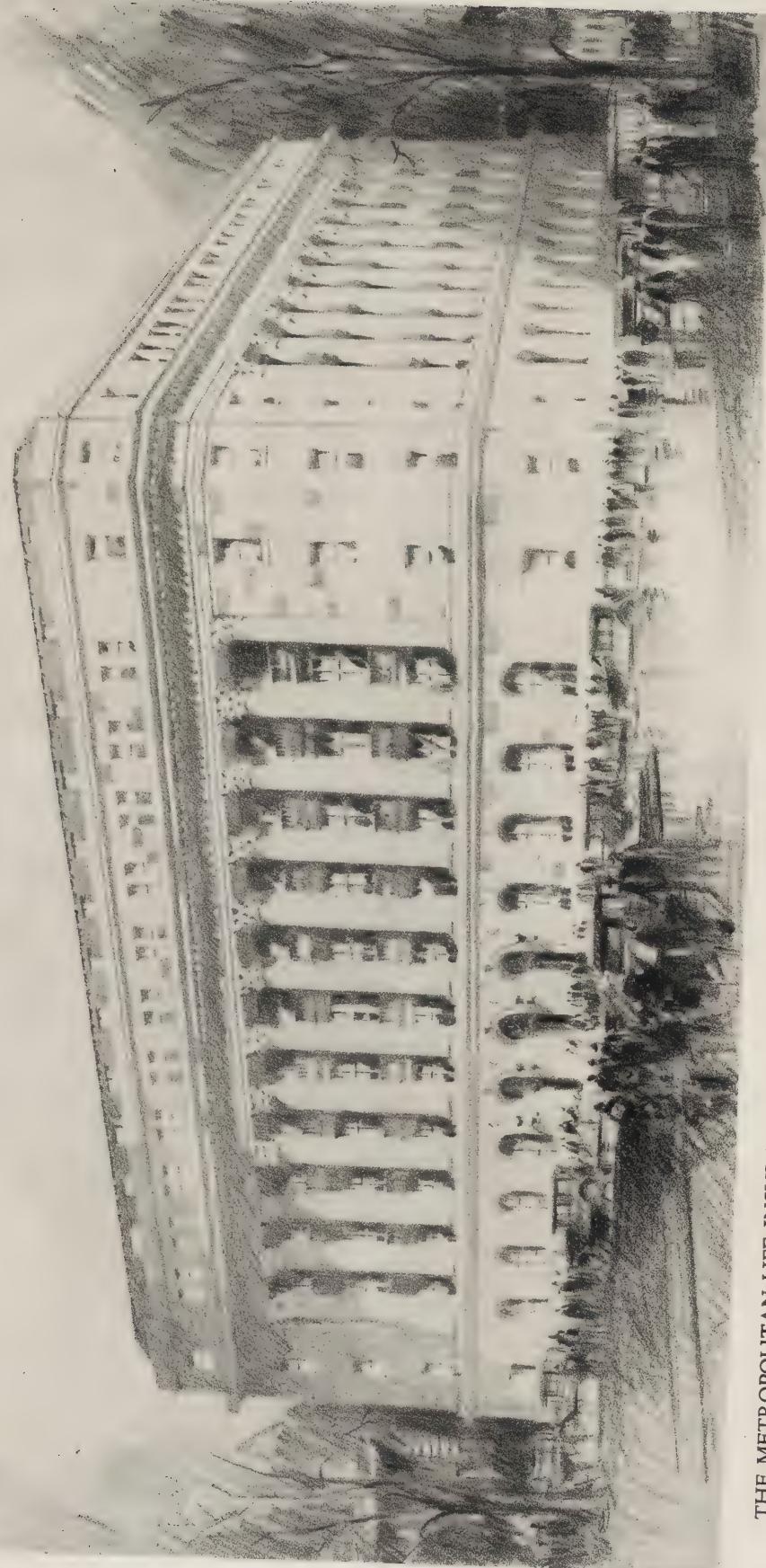
VOL. VI. No. 6

PLATE XXII



GEORG LOBER, SCULPTOR
SEAWEED FOUNTAIN.

Fountain sculpture and garden statuary are so closely related to architecture that they are always of interest and the fountain figure by Georg Lober shown on the other side of this sheet is especially attractive because of its beauty and lively spirit.



THE METROPOLITAN LIFE INSURANCE COMPANY'S HEAD OFFICE FOR CANADA, OTTAWA, CANADA. D. EVERETT WAID, ARCHITECT.
RENDERING BY HUGH FERRISS.

A drawing by Hugh Ferriss that conveys very effectively the dignity and beauty of design of the building it presents is shown on the other side of this sheet. The delicacy of the tones, the fine gradations in many parts of this drawing, the skilful use of sharp darks just where they are needed to give life and vigor and to establish the value of the delicate tones is notable.

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PLATE XXIV



WOOD BLOCK PRINT BY CHARLES TURZAK.

THE CHICAGO TRIBUNE TOWER, JOHN M. HOWELLS, RAYMOND M. HOOD, ASSOCIATED ARCHITECTS.

A remarkable impression of the spirit of the Tribune Tower, Chicago, is conveyed in the wood cut by Charles Tursak, reproduced on the other side of this sheet. Simplified, and drawn with an irregularity that prevents any sense of stiffness, this presentation shows the boldness of handling that requires genuine artistry.

DESIGN IN THE DRAFTING ROOM, III

BY JOHN C. BREIBY

FOR the purpose of illustrating the main point brought out in a previous article of this series (see March number), namely, the importance of knowing how to draw well, I wish to refer to the interesting and helpful articles on "Master Draftsmen", by Francis S. Swales, which have appeared from time to time in this publication. In these intimate articles Mr. Swales weaves an exquisite romance around the master and his work. In every case the master was elevated to his position through his ability to draw. These articles are well worthy of careful study by the architect and the draftsman and special attention should be given to Mr. Swales' emphasis upon the revelation of the character of the man through his work.

All architectural work—drawings, descriptions, specifications and even the superintendence—comes more or less directly under design in the drafting room. For the development of the design and the construction of the building emanate from the drafting room. In many offices the work is separated into distinct divisions as follows: designing, working drawings, specifications and superintendence. If these various divisions do not work together the organization is not a success.

Unfortunately, unjust criticisms or slighting remarks regarding the character of the work are sometimes meted out to the staff by the various members of the organization from the architect down to the office boy. One cause of this condition is the desire of one person or another to create an impression of his own importance or to win favor with those higher up. There is a fixed idea in the minds of many that the designer is without knowledge of the practical man's work, and that the practical man is without education in design or appreciation of it. Men trained in architecture may and do specialize, but all are guided by the same spirit—architecture—and the really capable men all work on the basis of a broad, preliminary training.

As an instance to illustrate how superficial is the division between the so-called designer and the so-called practical man:

I was working with an unusually clever designer in a city distant from the home office. An important question arose regarding the steel structural work which the local bureau of buildings refused to approve and immediate action had to be taken. On Sunday morning the designer was hard at work,

not on design, but performing mathematical gymnastics in structural engineering, working out eccentric loads on heavy steel columns, stresses and shear on rivets, etc. When the writer expressed surprise at this man's knowledge and his ability to perform these calculations, the designer replied, "Why, of course I know how to do it, but I don't want the office to know." He was actuated in concealing his knowledge of engineering by the fear of jeopardizing his position as an "artistic" designer. It may be added that his calculations were approved by the bureau of building and the home office never knew to whom credit was due.

A few words regarding the organization of an architectural office. It is not good to confine designers within a gilded cage to be looked upon as nightingales to warble architectural songs without appreciating serious conditions, and the members of the practical staff should not be regarded as parts of a machine. The intention here is not to criticize well organized offices, systems for producing work nor any overseeing by the staff, for all this is most necessary when there are more than "two or three gathered together."

There are various opinions in regard to the job or squad captain system, that is, in making the squad captain directly responsible to the firm. In such a case the squad captain has full charge of the interpretation of the designer's sketches, making of working drawings, consultations with everyone who is in any way engaged upon the work under his care, the supervision of the structure and is held responsible for the profitable conduct of his particular job. He need not necessarily know the commission, pay roll, etc., but he should know what the cost of preparing drawings should be and see that they are produced within the allowed amount. With such an arrangement, if the work is not produced successfully and



Figure 1. 1st Preliminary Study for the Buhl Building, Detroit, Michigan.
Smith, Hinchman & Grylls,
Architects.

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Figure 2. 2nd Preliminary Study for the Buhl Building, Detroit, Michigan.
Smith, Hinchman & Grylls, Architects.

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economically the fault must lie with the squad captain. This is an excellent system when a member of the firm can devote his attention to the general work of the drafting room when many employees are engaged or many jobs are on the boards or under way. If a member of the firm can not undertake to "watch matters in the drafting room", then it is very necessary to have a super-squad captain or chief draftsman. The squad captains should have their individual work so well in hand that the chief draftsman need only go over important questions or act as referee (if such a term may be used in this connection). It is, of course, obvious that the chief draftsman is in charge as head and should receive all instructions issued by the members of the firm, clients' wishes, questions from contractors, etc. But the chief draftsman should not be troubled with such questions as to how thick a wall should be or if print of drawing number so and so has been issued. Some of the larger organizations in the country have used such a method with remarkable success.

The architectural profession must keep up with the existing conditions of commercialism and utility. But thought must be given to the lasting quality of

architecture as it is done today, shall it be said, "on a production basis". What painter can paint portraits on a production basis? and architecture is no meaner art than painting. Granted that general architectural work involves invested capital and the result must show a profit to the investor—an architect cannot say to a client, as a doctor can, "Unless you do as I say you can't get well," or "I must decline to treat your case." The architect has certain limitations imposed upon him by his client and he must make the best of them. A contractor's representative once said, in effect, that architecture or design was not good unless the investment brought in the best possible return. Another remark was heard from a different source, "Oh! use about the same amount of splash as we used on —— building." A large amount of architecture is manufactured on a production basis and this is to be guarded against. The contractor was perfectly right from his standpoint of expediting the work and considering it in terms of money. But if the seeds of commercialism are sown too thickly they will destroy the scattered seeds of art and beauty. The second remark is more insidious, for it smacks of indifference, which spells disaster. Whether a job be monumental,

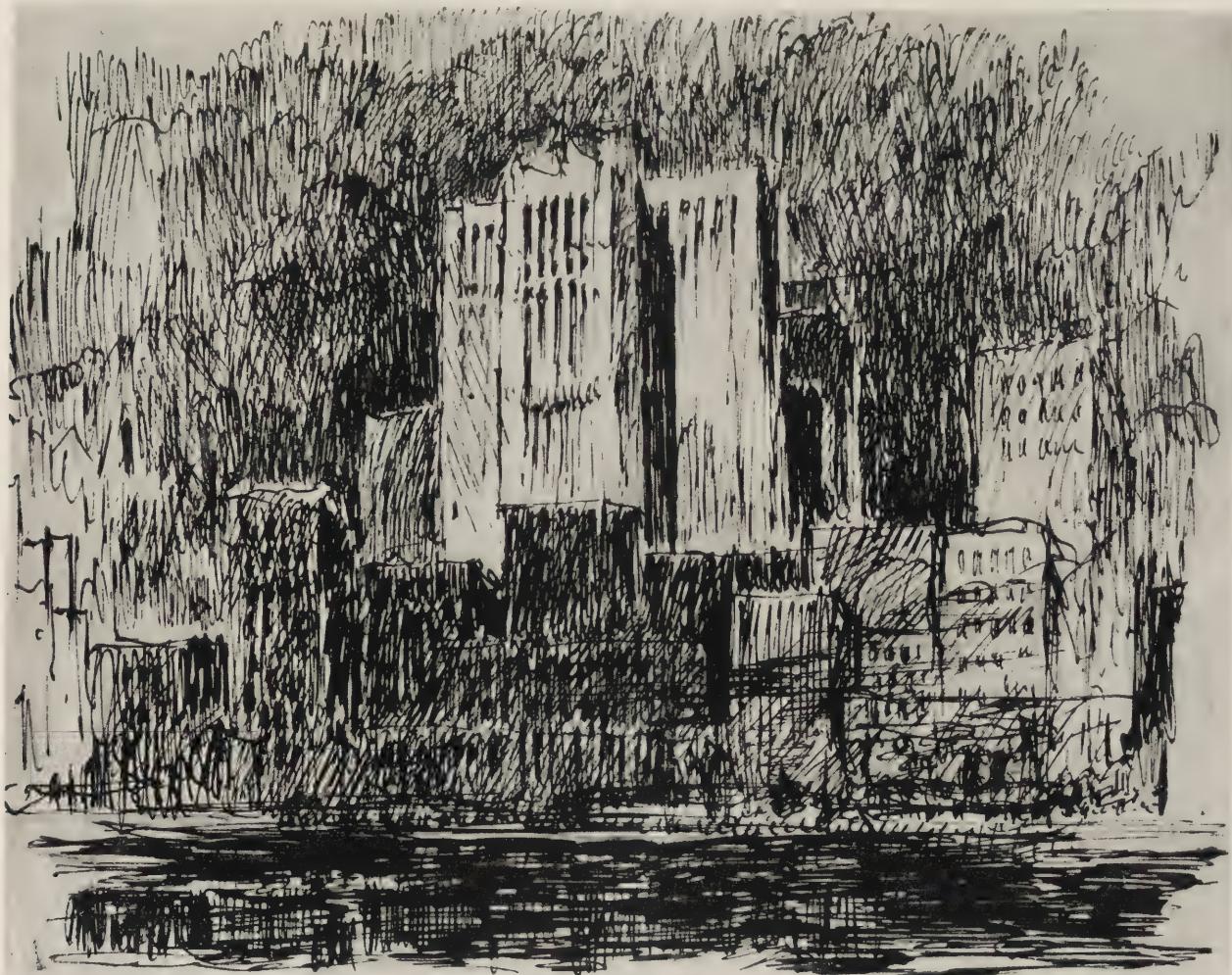


Figure 5. Imaginative Sketch of the Buhl Building Seen from the Detroit River.

PENCIL POINTS

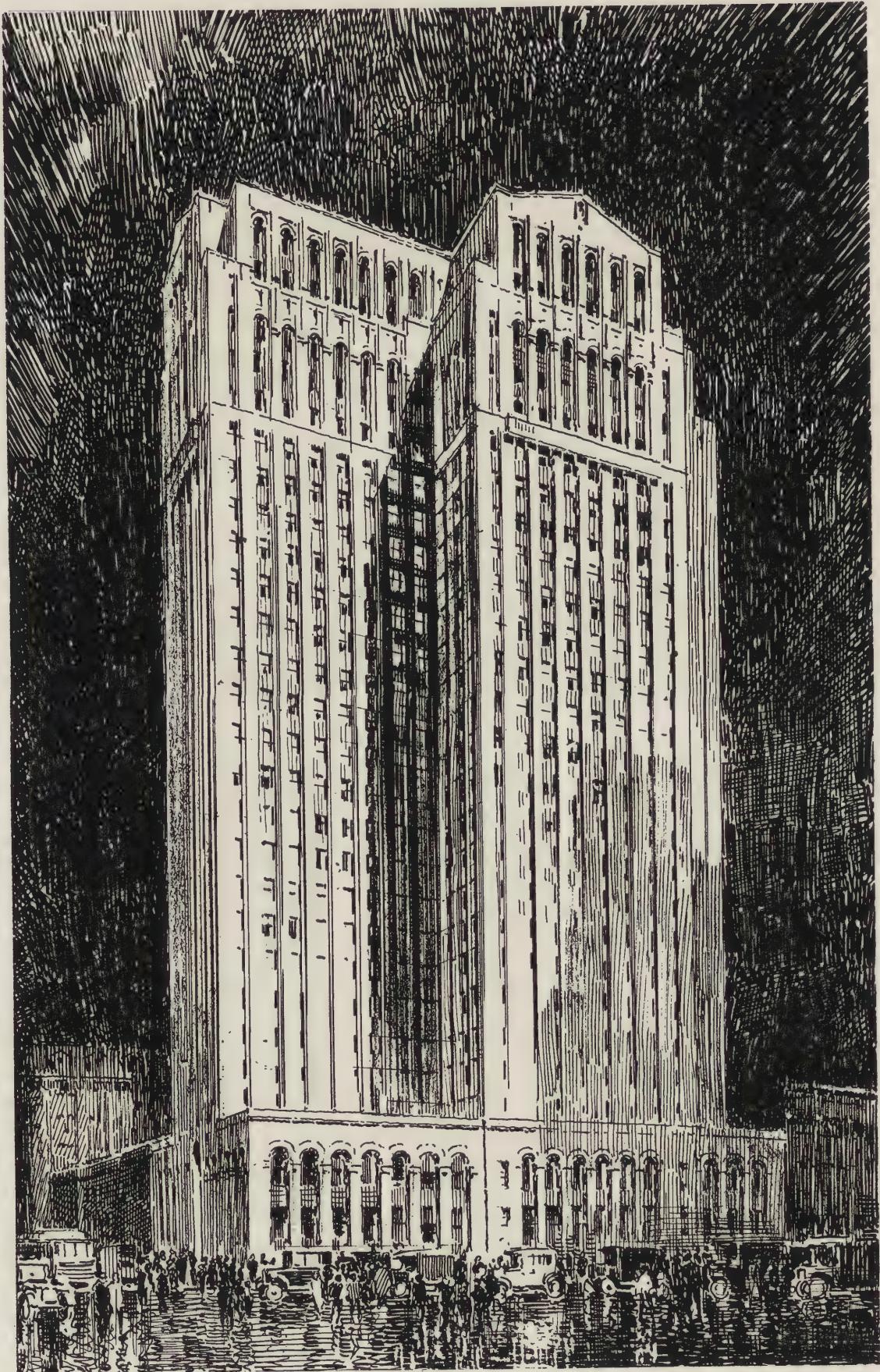


Figure 3. 3rd Preliminary Study for the Buhl Building, Detroit, Michigan.
Smith, Hinchman & Grylls, Architects.

PENCIL POINTS



Figure 4. 4th Preliminary Study for the Buhl Building, Detroit, Michigan.
Smith, Hinchman & Grylls, Architects.

PENCIL POINTS

commercial or residential, it must be designed for itself and carefully worked out in a manner suitable particularly for its purposes and not by using some sort of similar "splash".

Space will not permit us at this time to consider the proper uses of decorative characteristic materials for sound architectural effects. Stone is stone, terra cotta is terra cotta—substitutes can well be used, but to imitate materials without the most careful consideration is merely "gilding the farthing".

The first four illustrations reproduced are studies, chiefly for development and scale, of the Buhl Building, recently completed in Detroit, Michigan, of which Smith, Hinchman and Grylls are the architects. Mr. Thomas E. King is the delineator of these drawings. The fifth illustration is a reproduction of a fountain pen sketch made on the back of an envelope by Mr. Wirt C. Rowland, and the sixth illustration is a suggestive sketch study for an office building, drawn by Mr. Rowland.

It will not be necessary to make any special comments as the drawings speak so well for themselves.

Figure 1 shows a study in pencil suggesting the general mass scheme without any detail indication.

Figure 2 shows another study in pencil in bolder stroke, the wall surfaces are well brought out. This is a very charming sketch and is well worth close attention. Note the indication of life and activity in the foreground.

Figure 3 shows a pen and ink sketch most delightfully presented. The general mass of the structure has undergone a decided change brought about by required conditions. The cross shaped plan or scheme has been retained above the arcade treatment. The deep shadow and suggestion of shadows from opposite buildings emphasize extreme high lights where even window indication has been omitted.

Figure 4 shows a continued study of Figure 3.

(Continued on page 84)



Figure 6. Suggestive Sketch Study for an Office Building.

JUDGMENT OF DRAWINGS SUBMITTED IN THE JACOBSON ANNUAL COMPETITION FOR 1925

THE Jury convened on May first at the Architectural and Allied Arts Exposition in New York to consider the drawings submitted in this competition. Mr. Harvey Wiley Corbett was selected as chairman, the other members of the Jury being John Mead Howells, Raymond M. Hood, Harry Creighton Ingalls and James Gamble Rogers. Messrs. Howells and Hood were not able to be present, but they subsequently concurred in the findings of the other jurors.

The problem as set forth in the program called for the decorative treatment of the auditorium of a theatre, ornamental plaster of stock design to be used where ornament was required. The competitor was left free to select the period style of decoration for his design, which could be a free interpretation but had to be consistent in character. Prizes amounting to \$1,000 were offered by Jacobson & Company for the purpose of stimulating a wider interest in the use of ornamental plaster of stock design and to bring out the possibilities of this material without the expense and loss of time necessary where special designs are called for.

The conditions required that there should appear on the drawings a schedule indicating all model numbers of stock ornament used by the competitors, the designer being left free to select stock ornament from the catalogues of any manufacturers. The competition was open to anyone with the exception of architects or decorators maintaining their own offices; men who derive their principal income as renderers on other than a salary basis and members of the organization of Jacobson & Company.

Judgment was made on the merit of the design from an architectural standpoint, upon the general excellence of the whole scheme and upon the presentation of the drawings. The prizes were awarded as follows:

- 1st Prize, to A. F. Darrin, New York.
 - 2nd Prize, to Jacques Abadie, Jr. and S. V. D'Amico, New Orleans, La.
 - 3rd Prize, to David T. Ellis, Philadelphia, Pa.
 - 4th Prize, to Keith I. Heine, Buffalo, N. Y.
 - 5th Prize, to A. Petrucelli, New York.
 - 6th Prize, to M. Grodinsky and F. Kastner, New York.
 - 7th Prize, to Ben. T. Young, Chicago, Ill.
 - 8th Prize, to William Hindley, New York.
 - 9th Prize, to A. H. DeBoer, Berkeley, Cal.
- The drawings awarded 1st, 2nd and 3rd prizes are

reproduced on pages 74 through 77 of this issue. The jurors were unanimous in their approval of the objects prompting Messrs. Jacobson & Company in offering this annual competition and were impressed by the amount of study and work given to the problem by those who entered drawings.

It is the purpose of the donors of this prize to announce later in the year the conditions of a competition for 1926 and it is hoped that all competitors in the first competition, whether successful or not, as well as others, will participate.

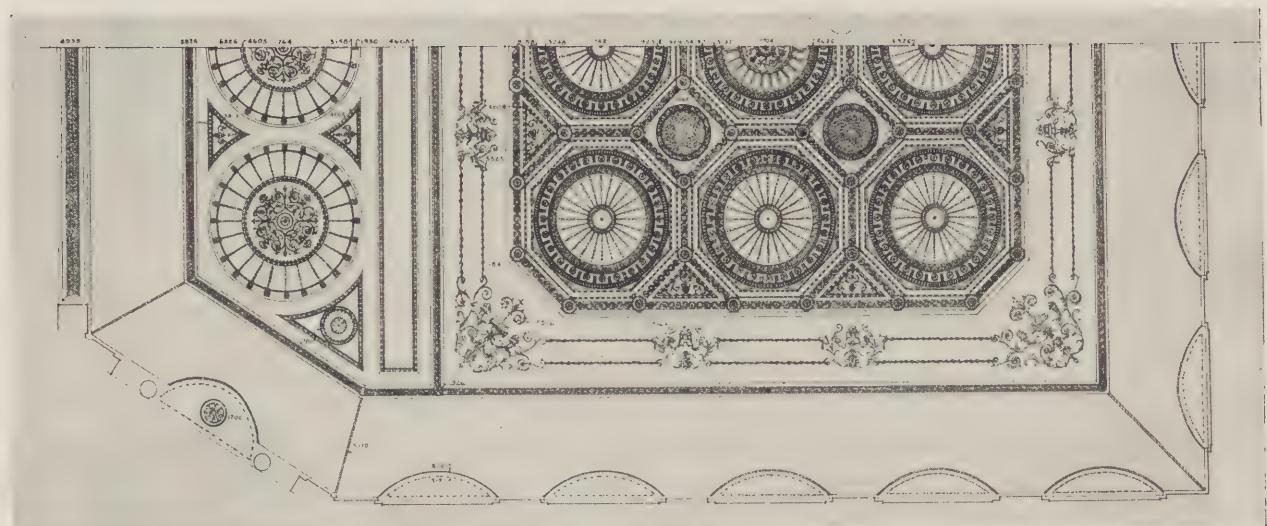
TERRA COTTA OF THE ITALIAN RENAISSANCE

A BOOK of great value to the architect and architectural student is "Terra Cotta of the Italian Renaissance," consisting of two hundred full page photographic views selected from among the large number taken by Arthur Frederick Adams, A. I. A., during the extended tour he made throughout northern Italy in the summer of 1923. Most of these photographs are "close ups", taken for the special purpose of showing the details clearly. This work satisfies a need for a comprehensive presentation of early Italian precedent in terra cotta and offers a great variety of motives which may be adapted freely in modern design.

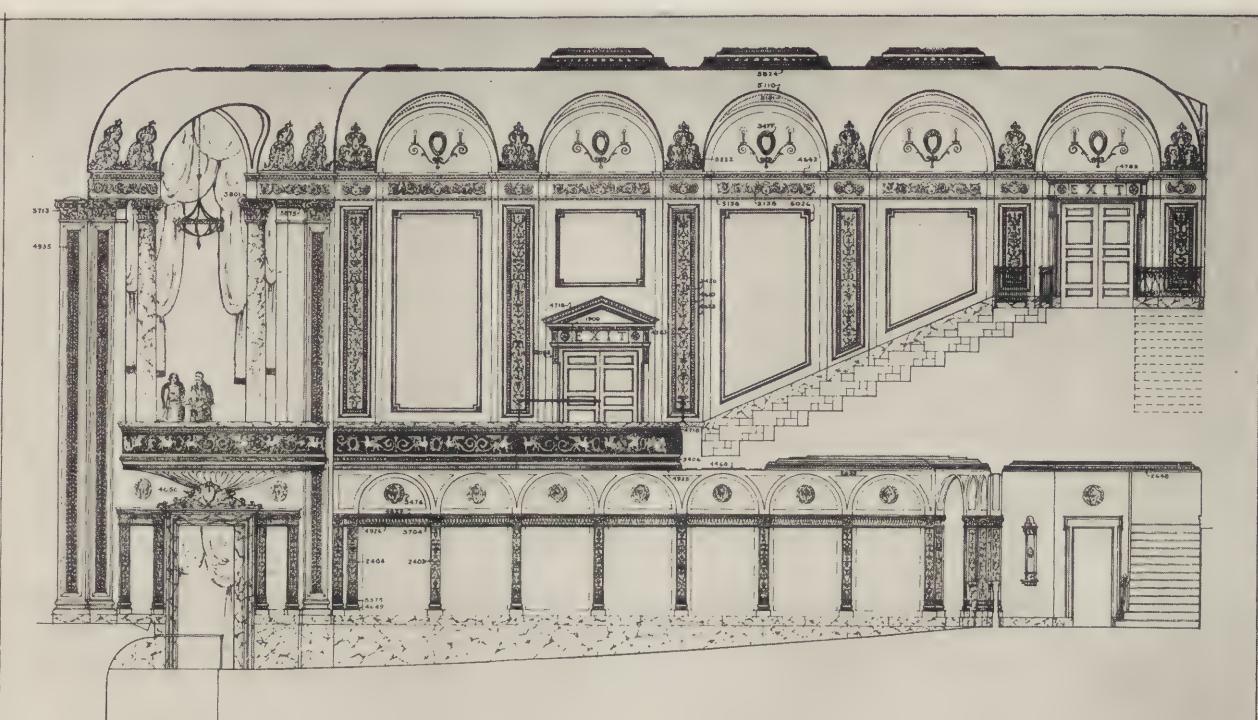
The Italian Renaissance offers a most fruitful field for study of design in terra cotta because the motives are well adapted to execution in modern work and because they show so thorough an appreciation on the part of the designer of the essential characteristics of burnt clay. Inspired by such designs as those presented in this work, and having at his command the greater latitude provided by present-day development of the processes of producing terra cotta, the architect has an opportunity to create noble and beautiful detail in accord with the nature of the material to meet present structural necessities. The examples of old work shown in this volume provide a source of sound tradition from which the designer may proceed. The book is composed of unusually interesting material, well presented, and its publication is a distinct service to the architectural profession.

Terra Cotta of the Italian Renaissance, price \$3.00, published by the National Terra Cotta Society, 19 West 44th Street, New York, N. Y.

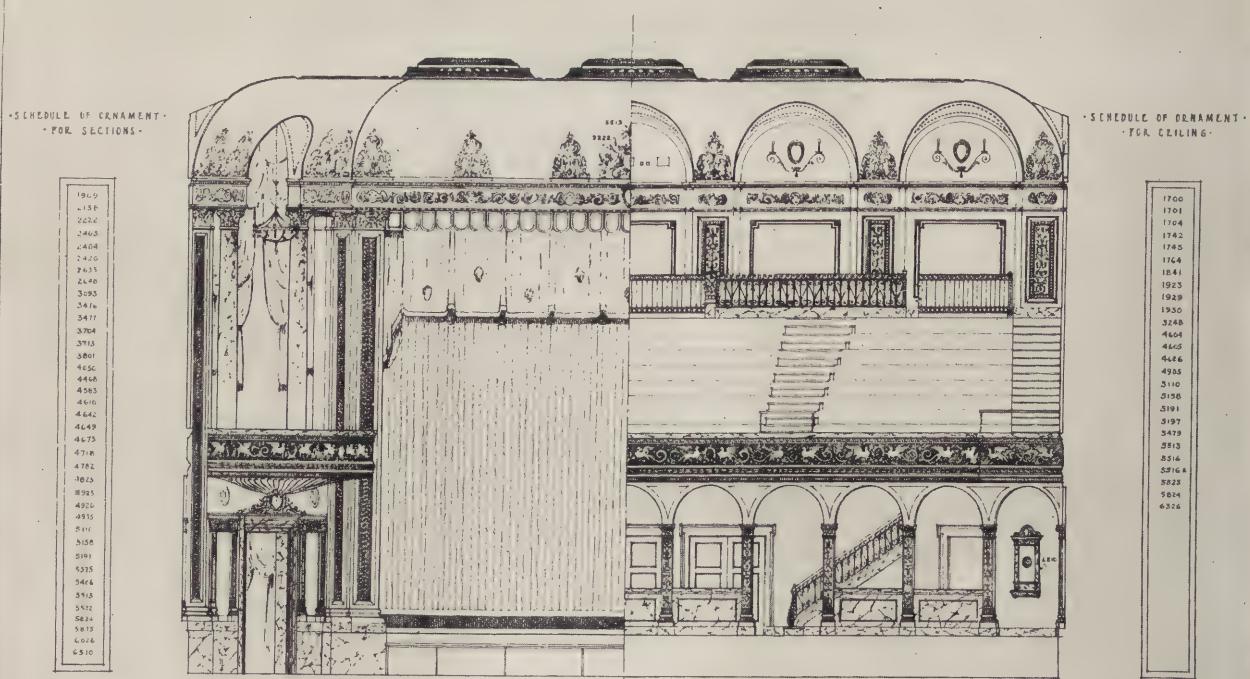
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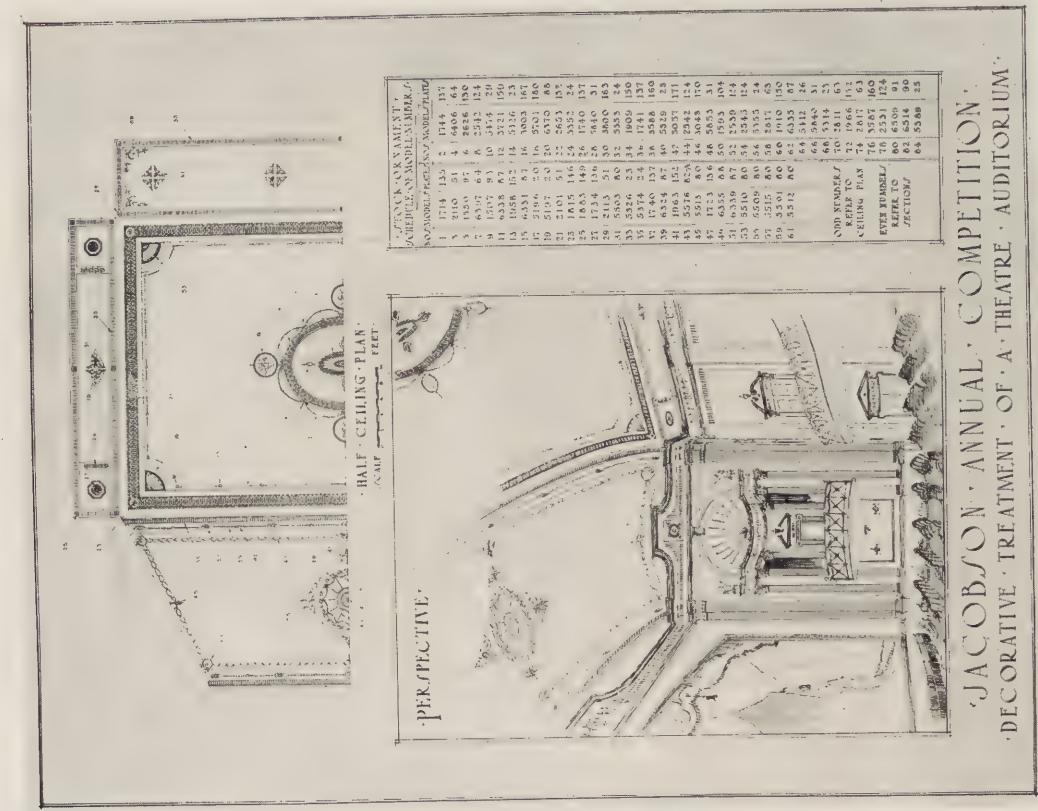


LONGITUDINAL SECTION



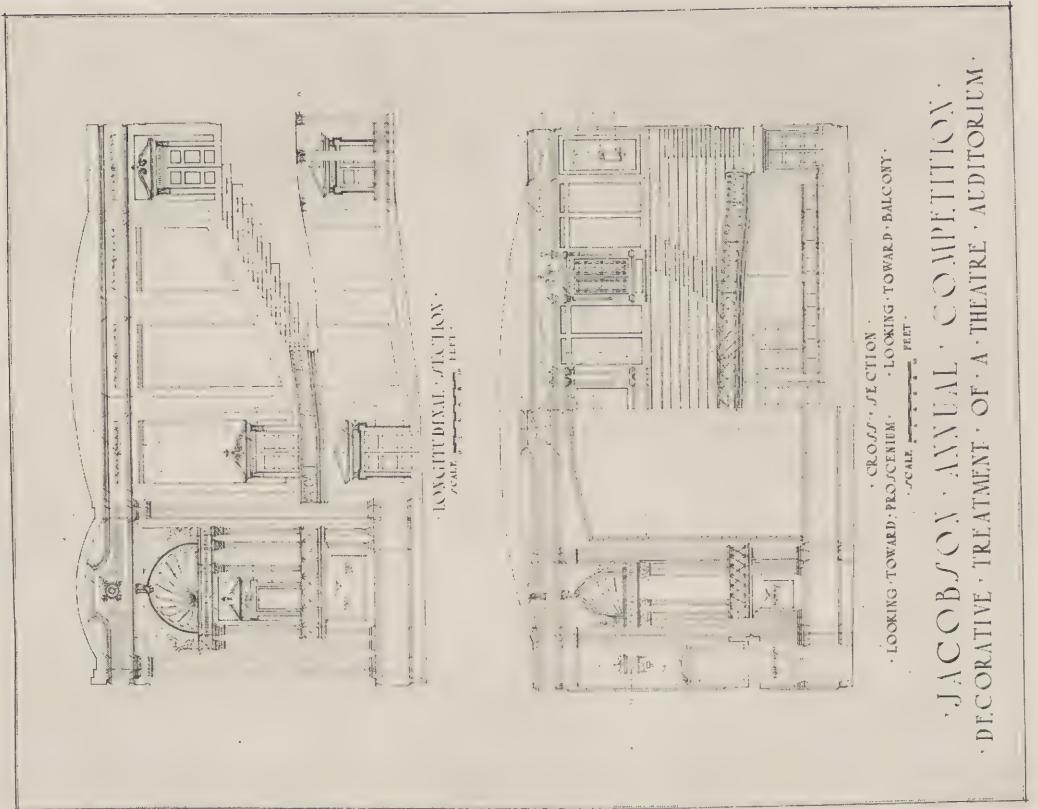
TRANSVERSE SECTIONS

Design by A. F. Darrin, New York City. Awarded First Prize in the Jacobson Annual Competition.

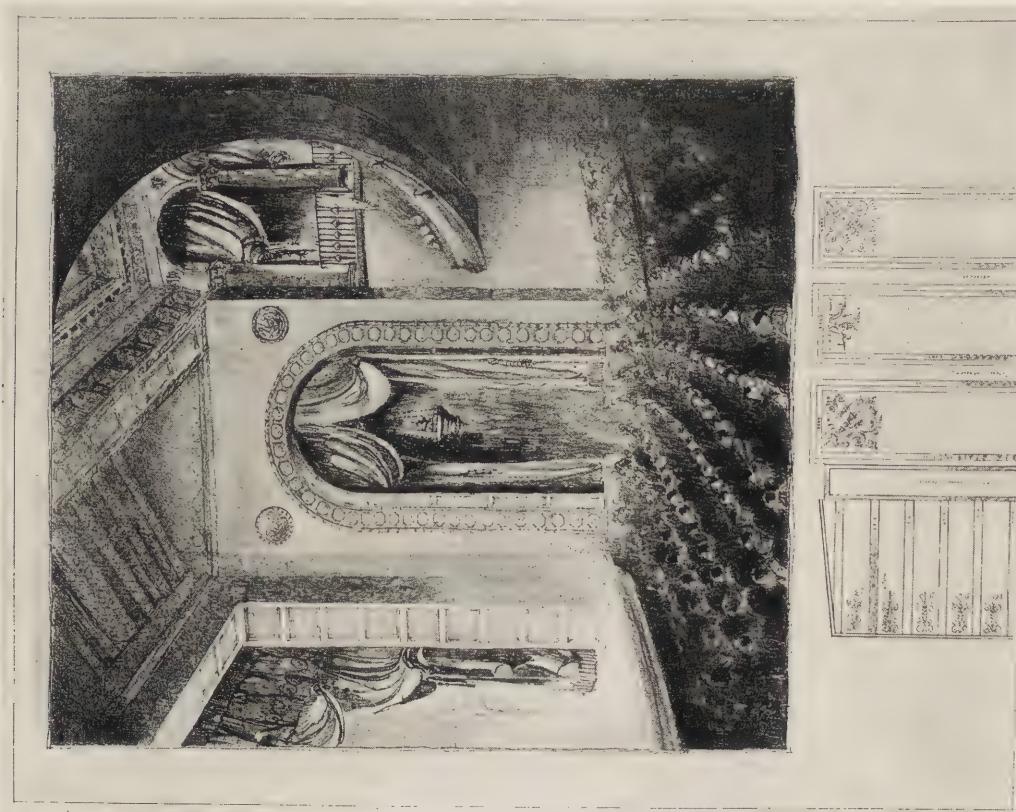
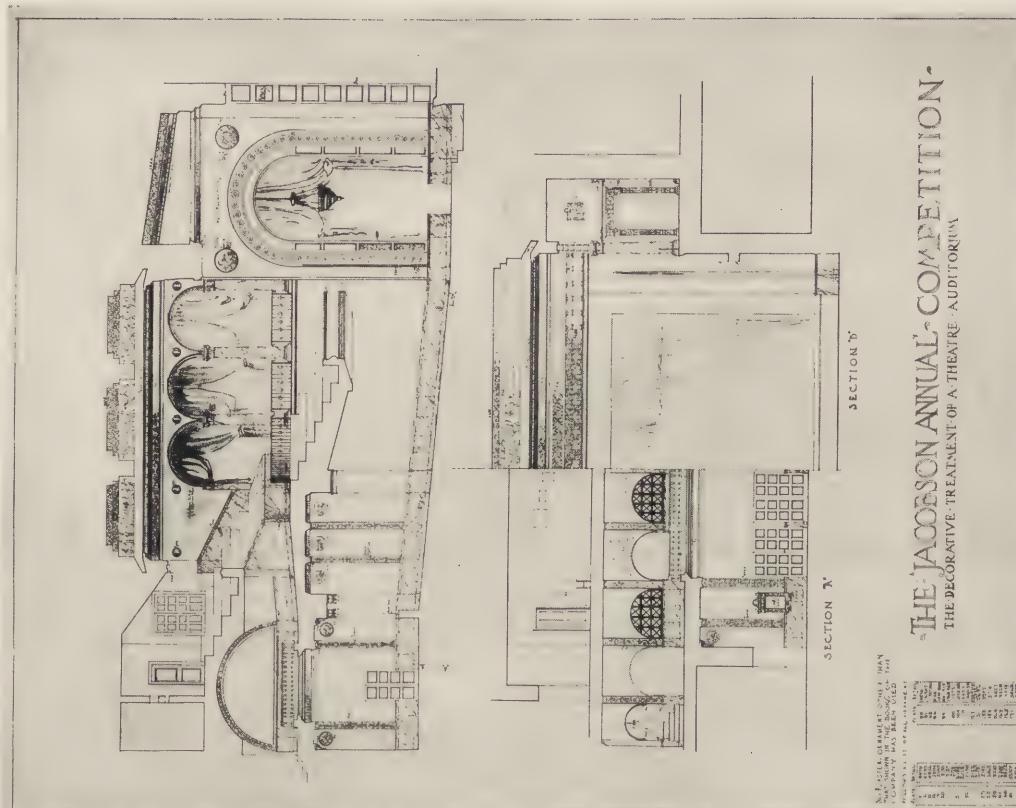


Design by Jacques Abadie, Jr., and S. V. D'Amico, New Orleans, La.

Awarded Second Prize in the Jacobson Annual Competition.



Awarded Second Prize in the Jacobson Annual Competition.



P-BASSILIO-P-FILIO
CRESCENTI⁴
TRIB-COH-GERMANOR.
PROCLVDI-MATVTINI.
COLLEG-FABRVM
TIGNVAR-OSTIS^{1.}

GERMANICO
CAESARI
TI-CAESARIS
AVG^{2.} F

SMARAGDVSEX PRAE POSS-SACRIPALATII
AC PATRICIVS SET EX ARCHVS SIT ALIAE
DEVOTVS SE IV SCL EM ENT TIAE
PROINNVM ERABILI BV SPI ETATI SE IVS
BENEFICISET PROQ VI E TE
PROCVRATA ITA LACC CON SER VAT ALIBERTATE,^{3.}

Roman Lettering from Hüibner's "Exempla Scripturae Epigraphicæ Latinae."

1. Ostiae, Tabula Marmorea (*Sed Fortasse Ex Cippo Desecta*); in Museo Vaticano.

2. Ostiae, Tabula Marmorea; *Nunc Romae in Museo Vaticano*.

3. Romae, Basis Columnæ Phocæ Imperatoris in *Foro Romano*.

IMRCAESARI
DIVI·FAVGVSTO

1.

QPELLVSQFDN
SECVNDVSDM
MEDIOMLESLEG

2.

VSO·CESA
TI·AVG·F·DEIV
AVG·NEPOTI

3.

ACCÉNSVS·PATRON
DIVO·AVGVESPASIANO
LICTOR·CVRIA T
4.

IMPP·VALERIANVS·ET·GALLENS
AVGG·VAERIAVS·N·BILISSIMVS
CÆS·COHRTI·VII; CNVRIS·ASO

5.

Roman Lettering, from Hübner's "Exempla Scripturae Epigraphicae Latinae."

1. Aquileiae, Basis Marmorea; Extat Tergeste in Museo.
2. Bonnae, Cippus Magnus Anaglyphio Militis Ornatus; Ibi in Museo Regio.
3. Sagunti, Basis Ex Lapide Calcareo; Extat Ibi.
4. Romae, Ara Magna Marmorea; Extat in Museo Florentino.
5. Iscae (Caerleon), in Castello Apud Silures, Tabula Magna Lapidea; Servatur Ibi in Museo.

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Demolition of Madison Square Garden.

This photograph, taken especially for this journal from a window of one of the buildings at the rear of the Pencil Points office, shows the close of the period of many years during which the sight of Diana has gladdened the eyes of the throngs passing through Madison Square and the much regretted demolition of one of the finest architectural works of McKim, Mead and White. It is understood that the tower is to be rebuilt at New York University where Diana will preside over the campus..

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Tenny Frank, Professor in Charge, School of Classical Studies, we quote the following:

"Preparations are now well under way for the excursions to Pompeii and Greece, which Professor Van Buren will conduct. We have taken the usual precautions in requiring vaccination and inoculation. Professors Wright and Galbraith are visiting North Africa; three students are going to Sicily this week with Professor Saunders; at Pompeii the group will number about thirty, while seventeen have registered for the Greek trip.

"Dr. Bryan's excellent monograph (No. IV) is now on sale. The early completion of the fifth volume of the Memoirs, the material for which is in manuscript, is assured by a generous gift of a thousand dollars from Mrs. Avery Coonley. Since the manuscripts of four new monographs, all of excellent quality, are nearing completion, it is gratifying to see former accumulations going to press. We are particularly eager to advance our religious survey of Italy, which Director Carter initiated and which scholars of all countries are urging us to complete as soon as possible. It is difficult to find students equipped in all the specialties requisite for such work, but this year Mr. Paul McGraw has undertaken to study the cults of Cisalpine Gaul and Mr. Arthur Gordon those of Latium. With Dr. Peterson's study of Campania and Professor Taylor's two monographs already printed, about half the area is now covered. Our publications are receiving such general recognition that there is no longer any difficulty in securing exchanges from even the most fastidious editors. To the great advantage of our library many important current publications, including those of the principal German academies, have been added to our list this winter.

"The excavations of the Augustan Forum are satisfying all reasonable hopes. The pavement has been laid bare for a few meters, and while no pieces of sculpture have as yet been found a large number of architectural fragments of interesting design and superb workmanship are coming to light. A survey is also being conducted to discover whether it is feasible to adopt Senator Boni's plan to excavate the Circus Maximus with the south slope of the Palatine, the Lupercal and the temple of Ceres. It is evident that future students of the Classical School will continue to be provided with new material for study in Rome."

From Gorham P. Stevens, Director, we quote the following:

"Professor Van Buren's party returned to Rome this morning from their trip to Greece, not all the members, however, for some had gone on to Constantinople, some to Crete, and others to Taranto and Naples. It was a success-

ful trip, and the entire credit should be given to Professor Van Buren.

"Our Annual Exhibition has been arranged for about the middle of next month, and H. M. the King has again kindly consented to come.

"The recent sales and exchanges of the *Papers and Monographs* and the *Memoirs* have been encouraging.

Sales in New York, according to minutes of meetings of October to March inclusive.....\$389.52
Sales in Rome since last October.....Lire 2,921.25
Exchanges since last October.....Vols. 451.

"We publish 600 copies of the *Papers and Monographs* and expect to publish 700 copies of the *Memoirs* in the future.

"The following gifts have come in:

\$100 from Mr. William J. Tully for the Library
\$1,000 from the class of '93, Princeton, for the Library, in memory of their classmate Dr. Jesse B. Carter, former Director of the Academy

\$100 given anonymously for books on English poetry.
A large collection of Roman brick stamps from Dr. Thomas Ashby.

"Mr. Mead has been in Rome for the past week. He left for Florence to-day. He spent his mornings at the Academy discussing Library matters with Prof. George B. McClellan and seeing the work of the Fellows. Prof. and Mrs. McClellan have also just left Rome.

"Two councillors of the Academy have been in Rome, namely, Professor Francis W. Kelsey and Mr. Fairfax Harrison. Prof. Kelsey came from Egypt, where he is undertaking some fruitful excavations, and he went on to Tunis, where he is also excavating. At the invitation of the Italian Government he and I, as representatives of the Academy, are going to Tripoli this week to attend an Archaeological Congress.

"Saint-Gaudens worked in Rome from 1871 to 1874. A number of his admirers are planning to place a tablet in front of the studio which he occupied. Our senior Fellow in architecture, Mr. Marceau, has kindly consented to draw out the inscription.

"You will doubtless be interested to learn that America is to erect a monument in Rome to commemorate the sixty or seventy American soldiers and sailors who died in Italy during the great war. The nature and location of the monument have not yet been determined, however."

From Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"Most of the Fellows and visiting students are again in residence.

"Henri Marceau, Fellow in architecture, has returned from Florence and is completing his final work, a study of the Villa Corsi Salviati at Sesto Fiorentino.

"Albert Floegel is working in fresco, and Lawrence Stevens is occupied with several figures in marble.

"Arthur Deam, second-year Fellow in architecture, after returning from a trip to Greece and Constantinople, has been preparing for a trip to Spain. Finley, first-year Fellow in painting, will accompany him.

"Norman T. Newton has well under way his final drawing, an elevation of the Villa Medici at Fiesole, and Alvin Meyer, second-year Fellow in sculpture, has made considerable progress with the shell of his Greek well-head.

"The first-year Fellow in sculpture, Harry P. Camden, is laying up a detail of his collaborative problem for his required relief, and Bradford, second-year painter, is in Florence copying in the Uffizi gallery.

"William Douglas, first-year Fellow in architecture, returned from Carthage early in the month accompanied by Woodbridge and Calder, visiting students in architecture. They have all been engaged, under Professor Kelsey, in studying the possible value of excavating on the site of Carthage. Conditions did not seem favorable. Douglas measured a temple of Celestis at Dougga and will make it his first year's restoration.

"At present there is considerable activity in preparing for the annual spring exhibition to be held during this month. The musical program will utilize the Choir of San Salvatore in Lauro and the tenor Nardi, of the Costanzi theatre, to interpret a program of the compositions of the Fellows in music.

"Four piano compositions by Elwell were included in the concert of works by 'representative American composers in Europe,' at the Rothschild Foundation, Paris, on April 25th. The concert was under the direction of *Association Francaise d'Expansion & d'Exchanges Artistiques*."

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ARCHITECTURAL CLUB OF NEW HAVEN

THE New Haven Architectural Club, Inc., at the annual meeting held May 7, elected the following named officers for the ensuing year: R. W. Foote, president; Alfred W. Boylen, vice-president; Philip Sellers, treasurer; L. R. Hammond, secretary; Alfred M. Thomas, auditor; directors for two years, George H. delGrella, Robert L. Waldorff, Philmer Eves.

The secretary's report indicated that the year ending with this meeting had, in many respects, been the most successful in the club's history. The report showed that the club has a total membership of 145, that the increase in membership during the past year had been 22, and the number of resignations two. Among the various activities of the club during the past year the two most notable were the establishment of the Leoni W. Robinson Memorial Medal for excellence in architecture, to be awarded annually to a Connecticut architect, and the Small Brick House Competition.

T. O. Appel was appointed chairman of a committee to arrange for the club's annual summer outing which will be held early in June.

NEW YORK ARCHITECTURAL CLUB, INC.

AT THE first meeting of the Board of Directors of the New York Architectural Club the following committees were appointed from the Board of Directors:

ORGANIZATION: Burke, Valentine, Paradies.

MEMBERSHIP: Capel, Elliot, Thomas.

PUBLICITY: Kayser, Culhane, Poll.

FINANCE: Smith, Finnegan, Scheffer.

SOCIAL: Dowling, Plum, Heinewald.

EMPLOYMENT: Weck, Hess, McBurney.

Architectural Tennis Tournament Division

The program for the ensuing year has been decided upon and the Announcement of events is reproduced below.

All those desiring to enter the different tournaments will kindly enter as soon as possible in order that the schedule may be completed in proper time for the opening of the season.

1925

— EVENTS —

CLASS A:
MENS-SINGLES: WILLIAM-ADAMS-DELANO-TROPHY.
ENTRIES CLOSE-AUG-19. FEE-THREE-DOLLARS.
J. J. P. WILLIAMS-CHAIRMAN.
OF-DELANO & ALDRICH-126-EAST-30TH-STREET.
GOLD-MEDAL-FOR-WINNER.
GOLD-FILLED-MEDAL-FOR-BRUNNER-UP.
TWO-SILVER-MEDALS-FOR-SUPER-FINALISTS.
FOUR-BRONZE-MEDALS-FOR-QUALIFYING-ROUND.

CLASS B:
MENS-SINGLES-HARVEY-N-CORBETT-TROPHY.
ENTRIES CLOSE-AUG-19. FEE-FIVE-DOLLARS.
MINIMUM-AGE-UNLIMITED-FOURTY-FIVE.
A. E. FLANAGAN-CHAIRMAN.
OF-HELMAN- & CORBETT-124-WEST-42ND-STREET.
GOLD-MEDAL-FOR-WINNER.
SILVER-MEDAL-FOR-BRUNNER-UP.
TWO-BRONZE-MEDALS-FOR-SEMI-FINALISTS.

CLASS C:
MENS-DOUBLES-FEE-FIVE-DOLLARS-EACH-TEAM.
ENTRIES CLOSE-JULY-15.
GEO-A. FLANAGAN-CHAIRMAN.
OF-DONN-BARBER-101-PARK-AVENUE.
SILVER-CUPS-FOR-WINNERS.
SILVER-MEDALS-FOR-BRUNNERS-UP.

CLASS D:
INTER-OFFICE-TOURNAMENT-ENQUIRE-OF
O. B. KAYSER-OR-J. O. BOOTES-367-LEXINGTON-AVE.

A. B. VALDORF, ILL.



Medal Design for Season of 1924-1925.

Architectural Bowling League Division

Wednesday, May sixth, was the date of the regular annual dinner which was held again this year at the Pershing Square Savarin. About three hundred men, including friends of the bowlers and distinguished guests of the League, were present and formed a very imposing gathering.

Major William F. Deegan, of Starrett & Van Vleck, was toastmaster for the occasion. Major Deegan is particularly qualified for such an assignment having been New York State Commander of the American Legion and in the habit of addressing large groups of men.

The press was well represented and all the leading newspapers of the city gave a very generous account of the dinner including remarks of some of the prominent speakers in favor of the club. Notable among these were Mr. D. Everett Waid, Pres. A. I. A., and Mr. Robert D. Kohn, prominent architect and ever popular speaker.

Mr. Donn Barber, who has been suffering from a slight illness, was ordered home by his physician the afternoon of the dinner and we therefore take the liberty of publishing his letter.

May 6, 1925

Mr. Norman T. Valentine, Secretary,
Architectural Bowling League of New York
New York City

Dear Mr. Valentine:

I can't begin to tell you how disappointed I am not to be able to be with you tonight. I had already heard rumors of your coming dinner some weeks ago, together with the secret that I was to be one of the invited guests, and so I have been looking forward to the joy of tonight for some time back.

The exploits of your Bowling League have interested me very much, and your idea of forming an Architectural Club appeals to me greatly. We have needed this sort of thing in New York for a great many years. Other and smaller cities have them, and I am sure they add not only to the good fellowship and understanding of all those in the architectural profession, but they promote a

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higher efficiency and a more interested attitude toward the work and design of building as a whole.

Therefore, I wish you every success in your undertaking and hope that you will put it over in short order.

With kindest regards, and renewed regrets at not being able to be present, I am, with the best of luck always,

Yours very faithfully,

(signed) Donn Barber

Beautiful silk banners to become the permanent property of the offices whose teams won the five and three-man tournaments this season, as the five, three and two-man tournaments last season, were an added feature and were presented in conjunction with the Bowling League trophies and medals. A reproduction of the medal design for the season of 1924-25 will be found on the opposite page.

Following is the standing of the teams in the three-man tournament:

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK 1924-1925

3 Man Team Standing

Standing of Teams	Name of Office	No. Games Played	No. Games Won	No. Games Lost	Team Average	High Team Score	Percentage
1	Donn Barber	24	23*	1	482*	561	.958
2	Cass Gilbert	24	21	3	478	590*	.875
3	McKenzie Voorhees & Gmelin	24	21	3	466	551	.875
4	McKim Mead & White	24	19	5	437	524	.791
5	Guilbert & Betelle	24	17	7	433	538	.708
6	A. C. Bossom	24	17	7	416	488	.708
7	J. G. Rogers	24	16	8	454	492	.666
8	Warren & Wetmore	24	15	9	423	550	.625
9	Holmes & Winslow	24	14	10	400	480	.583
10	Schulz & Weaver	24	14	10	392	483	.583
11	Peabody Wilson & Brown	24	14	10	374	445	.583
12	W. L. Stoddart	24	12	12	398	485	.500
13	A. J. Thomas	24	11	13	405	461	.458
14	J. E. R. Carpenter	24	11	13	394	466	.458
15	Schwartz & Gross	24	10	14	379	465	.416
16	Starrett & Van Vleck	24	10	14	374	498	.416
17	York & Sawyer	24	10	14	350	428	.416
18	Shape Brady & Peterkin	24	8	16	401	456	.333
19	B. W. Morris	24	8	16	380	450	.333
20	T. W. Lamb	24	6	18	376	432	.250
21	Sommerfield & Sass	24	6	18	371	512	.250
22	J. R. Pope	24	4	20	381	441	.165
23	Kohn & Butler	24	2	22	332	380	.083
24	Patterson Wilcox	24	1	23	344	499	.041
25	A. F. Gilbert	Forfeit	0	0	—	—	—

Winning Team: Donn Barber—Lost—1 Game.

High Team Average: Donn Barber, 482.

High Individual Average: Zabriskie, 178.

High Team Score: Cass Gilbert, 590.

High Individual Score: Miltenberger of Donn Barber, 245.

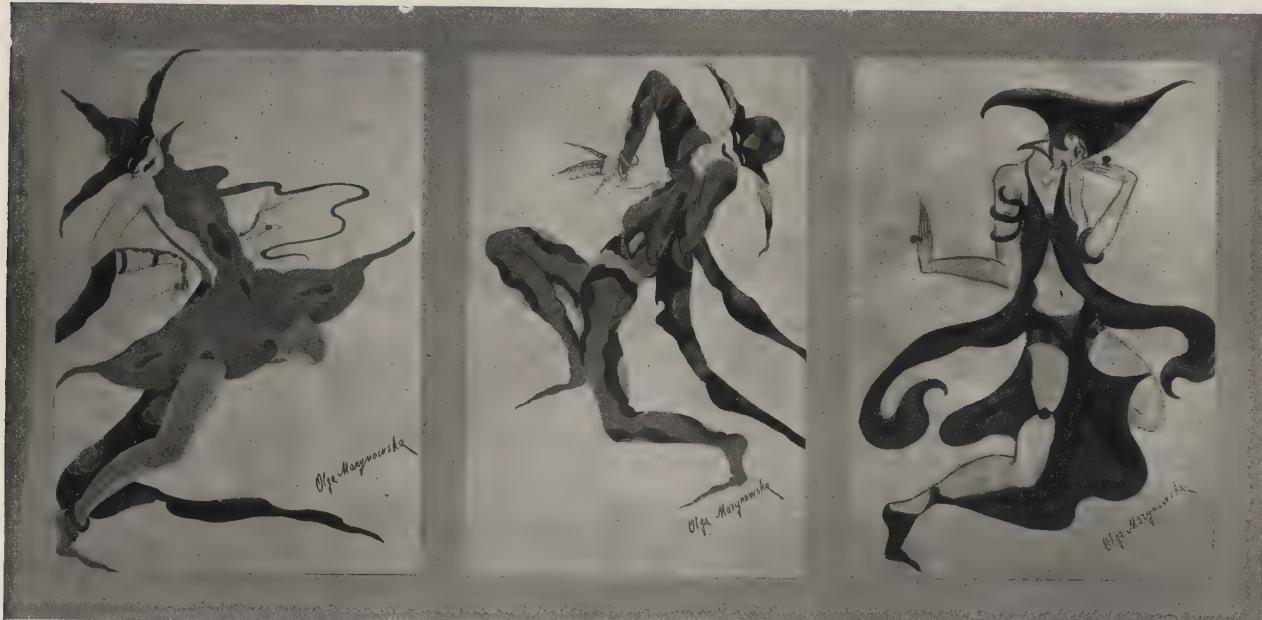
N. T. Valentine, Secretary

ARCHITECTURAL SOCIETY, SYRACUSE UNIVERSITY

IT HAS long been a custom at Syracuse University for the Freshmen of the various colleges to hold a parade on the first Saturday in May, "Moving-Up-Day", to celebrate their passing into the Sophomore Class. These parades have taken the form of either a burlesque upon, or a serious portrayal of, the salient features of the various colleges and departments represented. In late years interest in the parade has waned, inasmuch as the society which had formerly sponsored the affair no longer offered a reward for the best float entered. It was with the idea in mind of reviving this traditional pageant that our society sought and received permission to "put across" a real parade. Accordingly a large silver cup was purchased and conspicuously exhibited, together with the announcement that Sigma Upsilon Alpha would present it to the group of Freshmen who succeeded in getting up the cleverest entry in the parade. Further publicity was obtained in the college daily paper. The desired result was produced, for it was the general consensus of opinion everywhere that the parade was the best in years. Floats from nearly every college in the University were entered, as well as many from independent societies, etc. The services of the University Band were engaged, and after a short parley with the Mayor, the parade was led downtown, through the streets of Syracuse, where it attracted much admiration and attention. Needless to say, Sigma Upsilon Alpha has been invited to sponsor the parade again next year.

Tuesday Evening, April 21st, the architectural students were invited by the Painters and Designers to attend an Oriental Party, "Une Fête Chinoise," held in the College of Fine Arts building. Although on the eve of *charrette*, the boys turned out nearly one hundred percent. All were required to come in costume, and at first there was some hesitation on account of the amount of preparation required, but this was quickly overcome by one of our resourceful second year men. A miniature tailor shop was set up and soon we were turning out yellow jackets and blue trousers from cheese cloth. Further ornamentation and make-up were left to the individuals. A huge papier-mâché dragon's head was made, which proved to be highly realistic. Beneath a long yellow cloth body, forty enthusiastic Architects provided the necessary locomotion and noise. The Department of Architecture is on the opposite side of the campus from the other departments of the Fine Arts College. The passage of this "beast" on its way to the party attracted no little attention from the unenlightened students of other colleges.

Others of our number went in individual costume, gay smocks, lampshades, pajamas, and the like, being pressed



Designs for Cabaret Decorations by Olga Marynowska.

PENCIL POINTS

into service and producing many startling, although far from unsuccessful results. Prof. Fred R. Lear, in a costume of paper, portrayed the part of a Chinese mandarin in a quite realistic manner. Our fellow students, the painters and designers, were costumed in true oriental garb, and further Chinese atmosphere was obtained by the use of oriental decorations and chop-suey refreshments. Skits by several of our number were given, followed by dancing. It is now planned to make the get-together an annual affair.

We have just completed the initiation of a group of new members. The period of initiation culminated Tuesday evening, May 5th, in a grand rough-house, followed by the formal induction into the society. After the ceremony, the brethren assembled in a nearby ice cream establishment. Here several of the new members and the retiring seniors were called upon for speeches, which were given in a most spirited, if comical, manner, to the great amusement of the other patrons of the place.

We are now making plans for our Annual Banquet, to be held Saturday, May 23rd, at the new Hotel Syracuse.

Our students wish to congratulate the editors of Pencil Points upon the May issue, which we all consider unusually good.

DESIGN IN THE DRAFTING ROOM, III.

(Continued from Page 72)

The upper window treatment has been greatly benefited with the incorporation of the high arch scheme. Notice how part of the façade on the left has been contrasted with the side in high light and still is not confused with the dark sky indication. This drawing is also made in pen and ink.

Figure 5 is a very interesting imaginative view of the same building as seen from the Detroit River which, now that the structure is completed, will well stand the test of a free hand sketch of the actual skyline. Such sketches are of untold value. So many short comings are found in the proper exercise of the imagination and sketches of this nature unquestionably bring the imagination into play and provide the best method of cultivating it.

Figure 6 shows merely a suggestion—the form, a possibility that can be done with. That is all. What style, what colors, what details—is the tower too low? is the arched treatment wanted, etc., etc., this is all for the trained eye and imagination to decide upon and develop. But the thought is there, the result of a lively mind and the greatest obstacle has been overcome. The rest is merely the application of education and technique.

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(Other items on pages 92, 102 and 122)

Wanted: A good, all around draftsman who particularly likes designing. Work permanent if man is satisfactory. Salary \$50 per week. L. Rodman Nichols, Schenectady, New York.

Perspectives drawn, artistic renderings, pencil-color, Free lance work wanted, write A. B., care Pencil Points.



"At Dobbs Ferry, N. Y."

Pencil Sketch by Ralph Coolidge Henry, Newton, Mass.

MASTER DRAFTSMEN, XIII. ALBERT KAHN.

(Continued from page 58)

of the remarkable things about Mr. Kahn's drawing is that he produces excellent water colors, harmonious and true in values, although he is, or was, color blind.

Mr. Kahn has told of one of his early experiences when he had a narrow escape from being forced to terminate his architectural career. The head draftsman in the second office in which he had found employment discovered that young Kahn was color blind and casually mentioned the fact to the head of the firm. Kahn was called into the latter's office and asked about it, also advised that if actually color blind he ought not to waste his time at architecture, but take up some other work. His employer then turned to a rug on the floor and quizzed him about the colors in it. As luck would have it, he guessed all of them right, upon which he was sent back to the drafting room with the comment that he was all right on colors. "Had I guessed wrong, I am sure I would be a grocer or a butcher now. It was a very narrow escape," was Mr. Kahn's comment. (Had he become "a butcher," I suspect that Armour would have a secondary job with him by now.)

Kahn's early experience was much the same as that of countless others. He started as an office boy, which in those days meant running errands, grinding India ink, sorting and filing drawings, mounting drawing paper, etc., for two years without pay. To earn a little on the side he took a job cleaning horses in the morning before office hours. One morning, the head draftsman, whose olfactory nerves were sensitive, bodily kicked Kahn out of the office asserting at the same time that he was unfit for the profession. Some years later he afforded Mr. Kahn the opportunity of some gratification by admitting that his earlier opinion was not one hundred percent correct. However, Kahn stopped cleaning horses and found a job in the office of Mason & Rice, with whom he remained fourteen years, and then went into practice, in 1895, with George Nettleton and Alexander Buel Trowbridge. Mr. Trowbridge withdrew from the firm to become Professor of Architecture at Cornell University. Mr. Nettleton died a few years later. Then for a year or two Mr. Kahn became associated with his former employer Mr. Mason, and finally established his own offices in 1903.

Mr. Kahn regards as the outstanding experience of his professional life the good fortune of accidentally meeting Henry Bacon in February, 1891, in Florence. He had been in Europe only a short time and felt himself poorly prepared for the trip and could not settle down to work or find himself. Bacon took Kahn under his wing and invited him to travel with him. During three months Bacon gave him invaluable training. The three months were not without amusing incidents, one of which was this: Kahn had a very limited amount of money to spend and had to exercise the most strict economy. Bacon with the comparatively considerable stipend of the Rotch Traveling Scholarship was in better circumstances; but at that his money was pretty well gone when they met, so it was agreed that Kahn should take charge of the finances. That meant that Bacon would have to live and sleep in quarters to which he was not insured. Their first experience after leaving Florence was in Pistoia. Bacon suggested a hotel mentioned in Baedeker. Kahn's decision was another—which no Baedeker would include. They climbed to the third floor to have a look at the room, carrying their luggage with them. The room was satisfactory. The price, however, (two lire each) Kahn considered twice too high. The owner would not come down, so Kahn insisted on trying elsewhere. Bacon objected strenuously to carrying his luggage down again, but he was game. No sooner had they reached the foot of the stairs than the proprietor called them back, accepting the offer of one lira each. So back they went with their luggage up the three flights again. This was proof positive to Bacon that he had the right financier and thereafter left such matters to be handled by Kahn.

It has been said that one never knows a building until he has drawn it. If the saying is true, the importance to the architect of remaining a draftsman all of his life cannot be overestimated. If he likes to draw and sketch, his interest in his services as a designer and director of building works is not likely to fail or flag. He remains the valuable assistant to the client who takes pleasure as well as profit out of his building.

That Mr. Kahn has remained a draftsman, is shown by several of the sketches reproduced herewith which were made only a year or two ago.

FRANCIS S. SWALES.

PENCIL POINTS

SKETCH CLUB OF NEW YORK

THE SKETCH CLUB OF NEW YORK, an old organization of architects and artists, incorporated 1892, held its twenty-first annual re-union meeting, May 9th.

Over forty of the old members of the original club, men that used to study art and architecture together and who now are all busy in the actual grind of the profession, met together at Mouquin's in a very pleasant evening.

At these yearly re-unions there are always many speeches of reminiscence, and an announcement was made by Chairman A. T. Rose, of three members who had left for the other shore during the past year:

*Willis K. Polk, late of San Francisco,
Bertram G. Goodhue, of New York City,
Clarence S. Luce, of New York City.*

BROOKLYN CHAPTER OF THE A. I. A.

THE student Affiliation of the Brooklyn Chapter of the A. I. A. was quite successfully launched at a reception given these younger men of the profession by the Brooklyn Chapter, at the Pratt Casino, Wednesday evening, April 15th. The meeting was presided over by Mr. William H. Gompert, President of the Brooklyn Chapter, A. I. A., and had a social and educational background. The guests and speakers of the evening were:

Mr. D. Everett Waid, President of the American Institute of Architects.

Mr. Charles Pratt, Sec'y. of Pratt Institute.

Mr. Lancing C. Holden, A Dean of the Profession.

Mr. Robert Kohn, past President of the New York Chapter of the A. I. A.

Mr. William P. Banister, Sec'y. of the State Board of Examiners and Registration of Architects.

Mr. William H. Gompert, President of the Brooklyn Chapter of the A. I. A. and architect for the Board of Education of the City of New York.

Mr. Ernest Watson, Supervisor Department of Art, Pratt Institute, Brooklyn. Illustrator, pencil artist and expert.

These speakers in addressing the joint meeting brought out some very interesting points of special interest and value to all present but especially the younger men. They were well received.

Certificates of Student Affiliation were presented to about sixty young men by the President of the Brooklyn Chapter.

There was on exhibition at this meeting a number of interesting architectural models and an exceedingly fine collection of pencil and wash drawings by Mr. Thomas MacLaren.

Refreshments, smokes and other entertainment added much to the social side of the occasion. Of course, this meeting is but the beginning but it seemed a good start and the reaction which we are getting and the remarks which are drifting back to us are quite favorable and encouraging.

PERSONALS

RALPH BRYAN AND WALTER C. SHARP, formerly associates in the firm of Herbert M. Greene Company, Dallas, have formed the partnership of Bryan and Sharp for the general practice of architecture with offices in the Dallas Athletic Club Building, Dallas, Texas.

EARLE NELSON EDWARDS, ARCHITECT, has removed his offices to 315 S 15th Street, Philadelphia, Pa.

ALFRED FELLHEIMER, STEWARD WAGNER, ARCHITECTS AND ENGINEERS, have removed their offices to 155 East 42nd Street, New York.

GEORGE WHARTON PEPPER, JR., has become associated with Tilden and Register, Architects, in the general practice of architecture at 1520 Locust Street, Philadelphia, Pa.

CHARLES E. KEYSER, ARCHITECT, has removed his offices to 232 Miriam Bld., 609 Minnesota, Kansas City, Kansas.

DUCOMMUN & DIRKS, ARCHITECTURE AND ENGINEERING, have removed their office to 3602 W. Florissant Avenue, St. Louis, Mo.

SHIRAS CAMPBELL, INC., have removed their offices to 267 Fifth Avenue, New York.

CHARLES L. RITTS, has taken over the offices of the late George H. Washburn, Architect, 313 Parsons Bldg., Burlington, Iowa.

WAYNE EVERETT BELL, ARCHITECT, has removed his offices to 704-5 Mutual Home Bldg., Dayton, Ohio.

WELLINGTON J. H. WALLACE, has opened an office for the practice of architecture at 167 8th Avenue N., Nashville, Tenn., where he will specialize in churches.

GRIFFIN & WATKINS, ARCHITECTS, formerly Watkins & Company, Fairmont, W. Va., have removed their offices to Welch, W. Va.

EUGENE SCHOEN, ARCHITECT, has removed his offices to 43 West 39th Street, New York.

EDWIN E. CULL, ARCHITECT, has removed his office to 75 Westminster Street, Providence, R. I.

WETHERELL P. TROUT AND DALE TRUSCOTT, ARCHITECTS, have opened an office at 222 Jessup Street, Philadelphia, Pa. JESSE L. BOWLING, INC., have removed their offices to Suite 384, Arcade Bldg., St. Louis, Mo.

WILLIAM A. BINGHAM, ARCHITECT, has removed his offices to The Chester Twelfth Bldg., Cleveland, O.

HERBERT E. MURTON, ARCHITECT, will continue to practice at 46 Main Street, West, Hamilton, Canada, the partnership of Secord & Murton having been dissolved.

WILFRID EDWARDS ANTHONY, ARCHITECT, has moved his office to 131 East 47th Street, New York.



Rose Garden for Bernard L. Connell, Esq., Clark's Summit, Pa.
Charles Wellford Leavitt & Son, Landscape Engineers.

PENCIL POINTS

C. E. SCHERMERHORN

C. E. SCHERMERHORN, who died May 16th, 1925, was born in Philadelphia, a lineal descendant of Jacob James Schermerhorn, who settled in New York in 1636. He attended the public schools and after leaving the Central High School spent a year traveling in Europe furthering his education. He then entered the office of Stephen Decatur Button, one of Philadelphia's well-known architects of two score years ago. Upon the death of Mr. Button he succeeded to the practice. He formed a partnership with Harry L. Reinhold which, after a few years, was dissolved.

Mr. Schermerhorn was retained as architect for a number of important structures among which were the St. Andrew M. E. Church and Sunday School, Fleishmann Memorial Baptist Church, Davison office building, Children's Ward and Nurses' Home for the Women's Hospital, Farm buildings for the Campbell Soup Co., and Mr. Coleman DuPont, Truck House for Fire Department City of Philadelphia, Penna. Barge Club, Alterations to Philadelphia News Bureau Building, etc. He was associated with Mr. Reinhold in the rebuilding of the Montgomery County Court House at Norristown.

He designed numerous private residences, many of them for well known clients, among whom were Eugene G. Grace, "Rosebank," Aiken, So. Carolina, James E. Mathews, F. A. Shick and A. Newton Roberts, Bethlehem, Pa., Dr. Eugene G. Kistler and John F. Seager of Allentown, Pa., James Stuart Lowry, Atlantic City, N. J., C. Howard Schermerhorn, Philadelphia; Clarence Illingworth, Fox Chase, Pa., Dr. H. Bailey Chalfant, Pitman, N. J., Abram T. Eastwick, Norristown, Harry W. Hand, J. Scott Fowler, Reuben Windisch and Harry T. Overn of Oak Lane; G. C. Kuemmerle, Fort Washington, Pa., Edwin B. Malone, Taylorsville, Pa., H. A. Romberger, Germantown, J. H. Yocom, Bryn Mawr, and others.

Some years ago Mr. Schermerhorn formed an association with Watson K. Phillips under the firm name of Schermerhorn and Phillips, Associate Architects. Together they designed a number of public school buildings, churches, private residences, etc.

He wrote many articles for magazines and newspapers which were of particular interest to home builders. He was one of the first architects to broadcast talks on architectural and building subjects over the radio. His brochure "Services of an Architect" was broadcast from over thirty radio stations throughout the country and was published in many architectural, trade and home magazines.

During the World War he was attached to the Military Intelligence Section, Plant Protection Division of the General Staff U. S. Army.

Mr. Schermerhorn had a wide acquaintance and a host of friends. He was a member of many patriotic and fraternal organizations including The Union League, Crescent Lodge No. 493 F. and A. M., LuLu Temple, A. A. O. N. M. S., Pennsylvania Society of Sons of the Revolution, Founders and Patriots of America, Colonial Society of Pennsylvania, American Institute of Architects, Philadelphia Chapter A. I. A., T-Square Club, Second Troop, Philadelphia City Cavalry, N. G. P. and the Riverton Yacht Club.

He was also a member of the Fire Prevention Committee of the American Institute of Architects.

Mr. Schermerhorn leaves surviving him his widow, Sara Welch Schermerhorn, and a brother, Frank Earle Schermerhorn, an attorney.

Watson K. Phillips, his associate for twenty-five years, will continue the practice at 213 So. 5th Street, Philadelphia.

A LETTER from Mr. Pearsall:

The letter published in the April number regarding the future that is ahead of the men who make the drawings, the "pencil pushers," brings out many questions of interest to all the profession.

The question asked can be answered best from my own experience of thirty years, ten of which were spent at the board, as well as in study, but not college trained. I had no wealthy father or other relative to help me—in fact they knew nothing about my work. I married young, have paid my own way, kept my family in a comfortable home, and have some money invested. Except for a year and a half away from business with a nervous breakdown, I have not lost a day. I had no "pull." Some may call it luck, per-

haps it was, but I lay my success to hard work, continuous study, giving service—by which I mean a bit more than was expected of me—and treating the other fellow squarely.

There was one man, "who made plans" and called himself an architect who expected me to work as a sausage machine would—"raw materials, one end, finished product the other." He is not typical of the profession, for which we should give thanks.

Today I am establishing myself in a partnership, continuing to look up at the next rung of the ladder and reaching upward to get up on that rung.

Sounds optimistic—but there have been days of depression. I have succeeded with the profession as now organized and I believe there are opportunities for the man who will give of his best, as though it were his own work and avoid holding the money value so close to the eye that the service which is given, because of the interest in the advancement of the work, is lost sight of.

My experience includes the management of a department of engineers, and also an architect's office. It is my opinion that the form of organization that gives the manager full charge as to business matters and authority as to construction equal to the designer as an authority on matters of design, will work out to give each man in the organization an opportunity to advance according to his ability and energy. Each man has the opportunity to work at all parts of the problem—both design and construction.

The office so organized can turn out more work in a given time than by the other organization, with a head draftsman in charge inside and field superintendent outside, with never-ending conflict as to methods of construction and kind of drawings needed for efficient progress of the work.

The whole situation could, in my opinion, be materially improved both for the student and draftsman as well as for the head of the office.

First: In the architectural schools and colleges, add to the course some method to help the student visualize what he will be called upon to draw when he enters an office as junior draftsman. Opportunity to continue this study in the various offices through courses of instruction which would bring the building in detail to the student in picture form.

Second: Follow the manufacturers' method of keeping the sales and production in proper ratio to make it pay the costs and overhead. Educate the public to know and want the goods and service offered similar to the business man's methods. Keep charts on cost and progress of work so that the men are interested in keeping within a limited cost of production. Such data can be kept with a minimum of effort and, besides knowledge, creates interest and helps save cost.

Third: The office should be organized to gain the most efficient results and that form, in my opinion, is as above suggested, and is proved by my own experience—each man training to have his own business, and be a leader in the design or construction field.

Drafting is a personal service. In the advertising field we have the men on salary, but we also find the free lance artist. It is no disgrace to change and go from one office to another. It is an advantage. Pick your boss, make the change while the changing is good. No one can complain of a man bettering himself in his chosen work, but to continue to advance one has to study in architecture, as in everything else in life.

The established architect can do a great deal to make his men feel that they are valuable to him, in that they are helping to make a success of each building designed and erected. The development of the plan, design, construction and the details of all trades entering into a building are too numerous for one mind to cover all in the limited time allowed to prepare the necessary data for estimating and construction.

There is a future for the student, the junior and senior draftsman in the profession, but it is only won by hard work, study and perseverance.

Very truly,
William K. Pearsall.

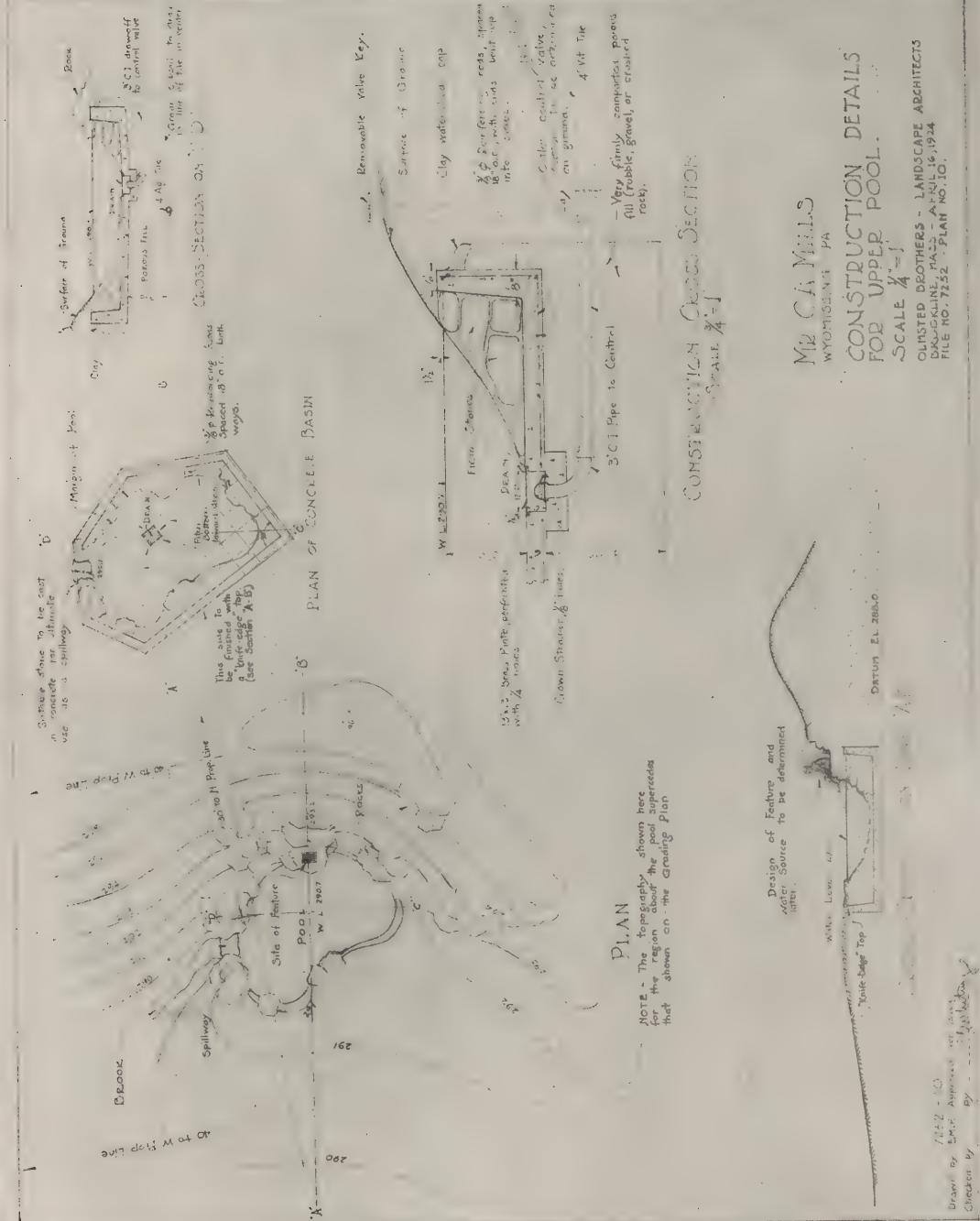
A CORRECTION.

Wm. A. Daunt Co., in their advertisement on page 125 of the May issue of PENCIL POINTS credited the design of the building mentioned to Salaam Temple Associated Architects, Henry Baechlin, Directing. The credit line should read "Architects, George W. Backoff, Frank Grad, and Henry Baechlin."

PENCIL POINTS

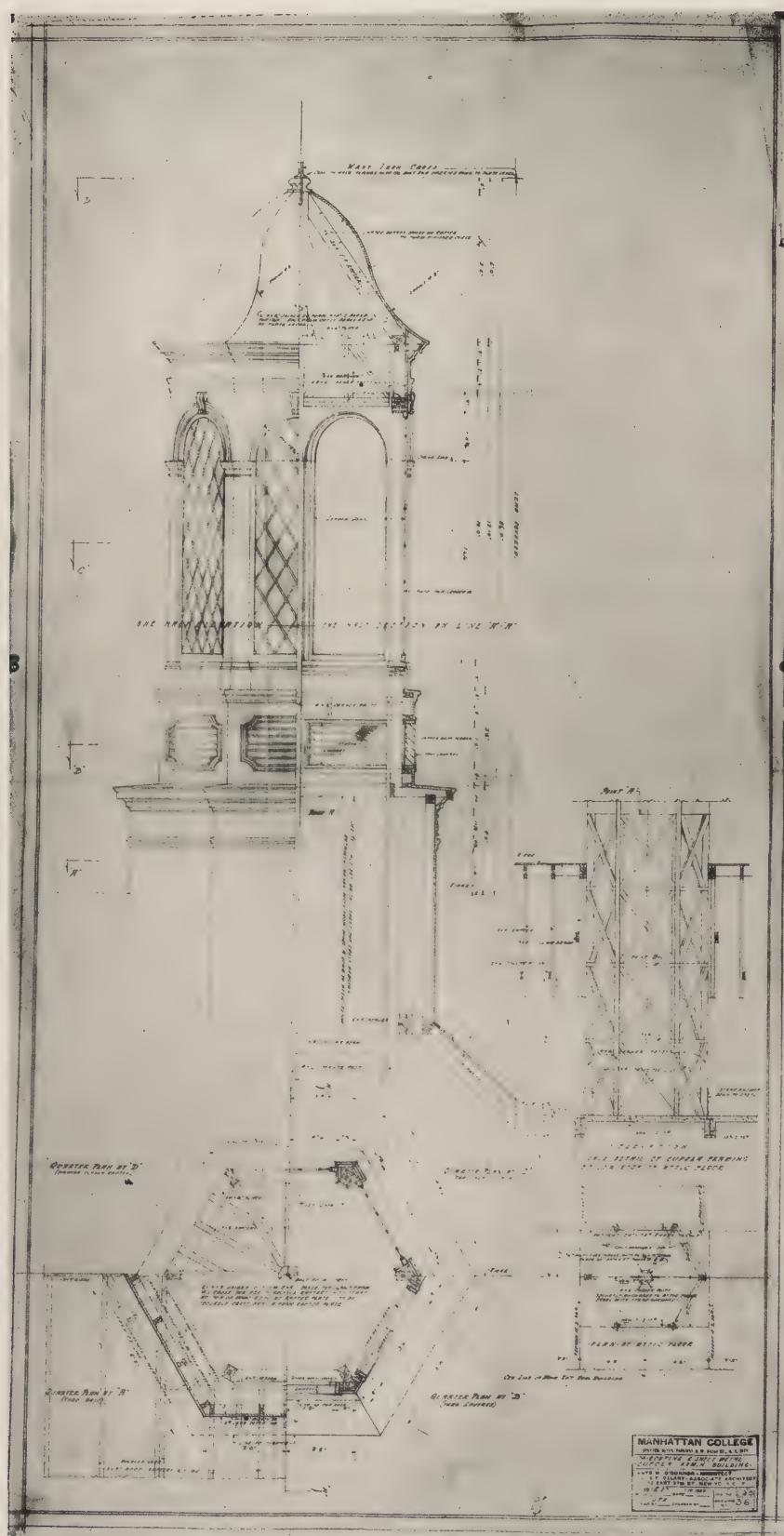


Pencil Sketch by John J. Klaber, Greek Doric Temple at Paestum.



Details of Construction—Pool for Mr. C. A. Mills, Wyoming, Pa. Olmsted Brothers, Landscape Architects, Brookline, Mass.

PENCIL POINTS



Details of Construction—Roofing and Sheet Metal Cupola, Manhattan College. Jas. W. O'Connor, Architect, Jas. F. Delany, Associate Architect.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

ANNOUNCEMENT EXTRAORDINARY

THIS department for July will be entirely written and illustrated by the members of the Pittsburgh Architectural Club. Ye Editor always gets extra lazy about this time of the year and so welcomes with enthusiasm, not to say fervor, the chance to let somebody else do his work. Also it has been hinted around here that almost anybody could do it better, which we concede. And it seems to us a good idea to have various groups of our readers located in different parts of the country use the facilities of this station for broadcasting their stuff, thus developing a little intersectional strife to see who can do it best—or worst. If anybody can do it worse than we do a beautiful piece of sculpture in solid ivory will be awarded.

What we are trying to get at is that we would like to have other groups carry on the idea started by the Pittsburgh Architectural Club. Let the other architectural clubs or groups, however constituted, take over this department for succeeding issues. Who will speak for August? And who would like to do it in September? About four pages of material is desired for each issue and it is left to each group to present what, in its opinion, is the most interesting assortment of sketches, verse, wise cracks, etc. Just get your stuff together and send it on so that we may have the necessary plates made. Material should reach us for the August number not later than July 10th and for September by August 10th.

Groups of architects and draftsmen outside of the United States are especially invited to partake of this extraordinary opportunity—an opportunity to do quite a lot of work without any remuneration whatever. Can you beat it? The line forms right here at the side of our desk—first come first served. We have already made a little bet that a certain group located in a certain place will step up and preempt this space for August. Maybe we are wrong. We usually are. We have been told so by experts. So if you have the urge to strut your stuff do not hold back, but send along a telegram making your reservation. Wouldn't it be fierce if we had to take off our coat and vest and do this department for August? So if you love us, even a little bit, send in that telegram and then send in some stuff to back it up, which will make what we have heretofore presented in this department look like thirty marks.

The little prize for the most meritorious contribution to this department for May goes to Charles Morse Stotz, Pittsburgh, for his sketch as reproduced on page 97.

SUMMER time is sketching time, so don't forget to stick a sketching block and a variety of pencils into your pocket when you go rambling around the countryside, and remember that this is the place to send your sketches. We cannot promise to publish them all but we do undertake to give each and every one the most careful consideration.



A LETTER from a contractor to an architect on why architects go cuckoo.

Dear Sir:

I am goin to ask you to get over on our side of the fence and look at things from our point of view. It has always been our policy to work with owner & Architect and to do the very best we can under the circumstances and after the job is done we want the owner to feel that we have been working to his advantage in following out his ideas.

I am goin to set down some things that we did that we did not say anything about so far. There was certain walls and ceilings that were plastered and were to be left as there were and be patched up as we progressed with the job, I realized that it would make a much better job to have all new plaster, then on the stair way it was to be left as it was but if it was you would not be able to get into the closet off the front room so I mentioned it to Mr.—and by taring out the whole stairway ceiling we could get a closet in, so I went ahead and did it, I paid the plasterer \$78.00 extra for doing the plastering that was taken down which was a very low figure and my extra labor amounted to \$23.00 & material. Then there was the showers they were not figured by us or any of the other men that figured on the job those cost us \$11.00 a piece the plumber refused to put them in. Then in that small room at the foot or the stairway you wanted a full length window instead of the one that was there so we put that in which cost us \$15.75. Then Mrs.—wanted a little drop table & drawer in her kichen down stairs we sent a man down and done it labor cost us from \$7.00 to \$9.00.

Then on the windows we did not want to wash the windows till we were finished. then after we were all finished we had to do them all over again which cost us an additional \$9.50. We were supposed to furnish new shades for the new windows only which we figured, instead we put in all new shades at an additional cost of \$10.25. By accident some water went through and stained the ceiling down stairs and we paid \$7.00 for retinting this ceiling. Just these few items I have mentioned cost us \$185.00 out our own pocket not out of the profits because there was none on this job because we done a good many other things that we were not supposed to but we done them because we thought it was necessary. I am not squealing about these things I just mentioned them because I think you are very unreasonable in your demands. You have got a very good job considering the conditions of the house. And I think you will relize that you have a much better job than you would have had if we had left the old plaster on and patched up to it strictly to the plans & specifications.

As Oh! Pshaw says in a recent issue of Pittsburgh First, "God gave us our faces but thank God we can pick our own teeth."

WE do not attempt to publish all the nice letters that our subscribers are sending us these days about PENCIL POINTS—we wouldn't have room—but here is one from Fred V. Little, secretary of the Boston Architectural Club, which pleases us very much.

Gentlemen:

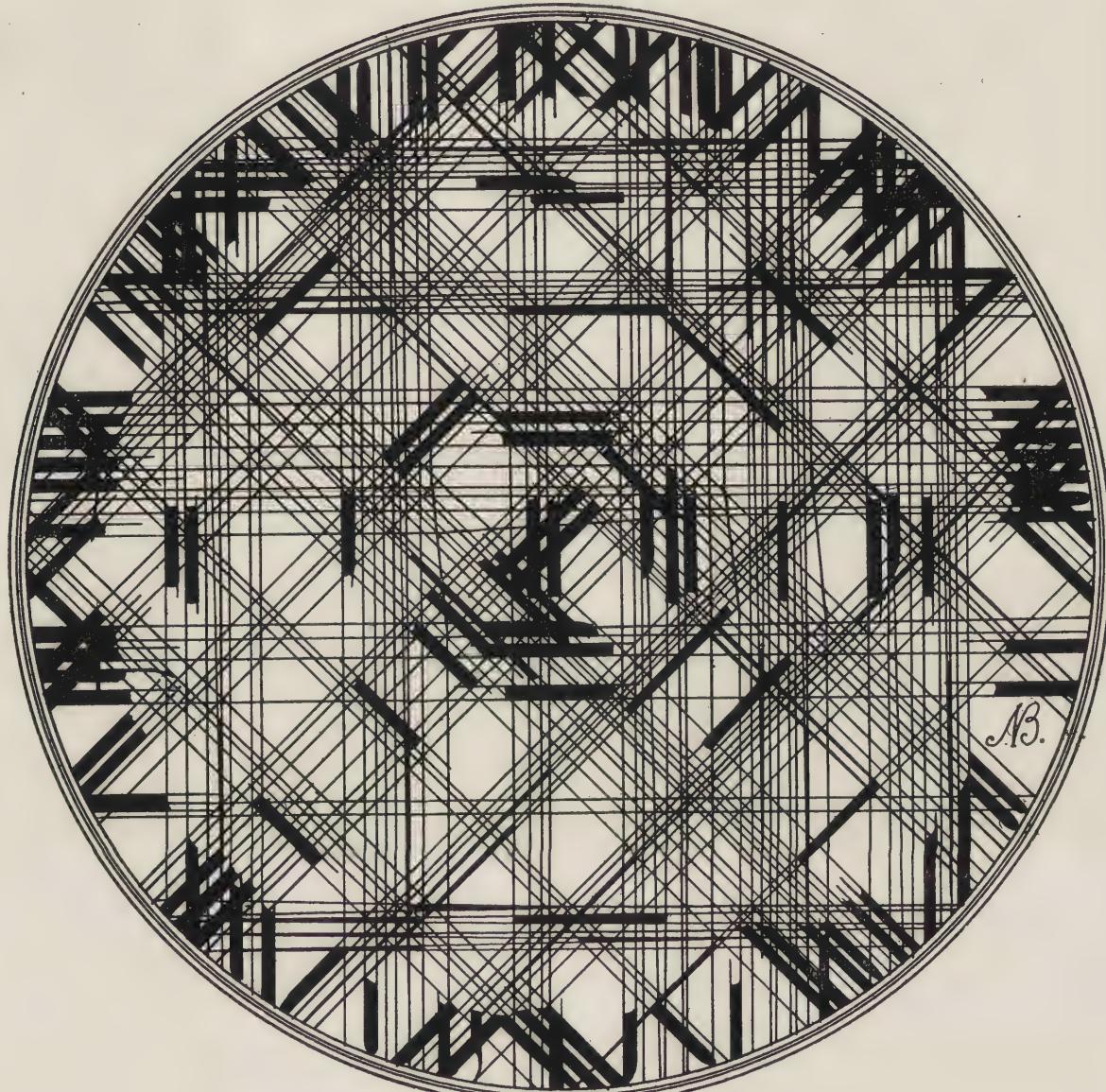
We are in receipt of orders for the 1924 Edition of "The BOOK" from New Zealand—Australia—various small towns in England—from Canada, and today from a native Architect in Hongkong, China, all enclosing clippings from PENCIL POINTS.

It may interest you to learn how thoroughly and comprehensively you are aiding us to "broadcast" the excellency of our BOOK and to what an extent your subscribers have confidence in anything recommended by PENCIL POINTS.

Very truly yours,

FRED V. LITTLE,
Executive Secretary.

PENCIL POINTS



Nathan Barth, Montreal, Que., submits a drawing, reproduced above at the actual size of the original, which had us all standing on our heads around here until we found the answer. No directions for solving the puzzle accompanied the drawing and we are not going to make it any easier for you to find the answer than it was for us. We hand it to Comrade Barth for his ingenuity and thank him most heartily for the sentiments so cunningly expressed.

Editor Here and There and Others.

Dear Sir:

We have been noting what you have to say about Here and There and now we wish to remark about the Others.

Last Wednesday evening, May 13th, the Annual Exhibit of the Department of Architecture was opened for the public. In the space of time between seven-thirty and ten-thirty over five hundred visitors had been conducted through the exhibit by students of the Department. It was the most successful undertaking of this nature that has been given by the Department.

Some of the added attractions were a stringed orchestra to furnish the muse, a group of three hundred sketches made by students in a Spring Sketch Competition, the prizes for which were donated by Mr. William Emerson, head of the Department of Architecture at Technology, and a group of sixty-five Wood Block Prints loaned to us by the American Federation of Arts in Washington.

Since the exhibit opened over twelve hundred spectators have visited us. Professor Walter T. Rolfe, Head of the Department, reports that there has been an increasing demand on the part of the public for a repetition of this particular kind of exhibit. There seems to be an added appre-

ciation of the Art of Architecture in this section of the country.

May the Seven Lamps grow brighter.

Yours truly,

ARCHITECTURAL SOCIETY, Harold Bechtel, Pres.
North Dakota Agricultural College.

J. M. Lindeman, 2 Central Ave., Hamilton, Ont., wishes to secure copies of the first six issues of PENCIL POINTS, and also the issue for October, 1924 to complete his set.

Thomas Raad, care Seelig & Finklestein, 44 Court St., Brooklyn, N. Y., wishes to secure a copy of PENCIL POINTS for March, 1922.

Oliver Quimby, 339 Adams Street, Brooklyn, N. Y., care Cox, Nostrand & Gunnison, wants copies of PENCIL POINTS for February, March and July, 1921.

H. B. Gold, 2682 Pitkin Ave., Brooklyn, N. Y., requires a copy of PENCIL POINTS for March 1922 to complete his set.

Subscriber, care PENCIL POINTS, will buy copies of the American Architect, dated January 3rd, February 14th, July 4th, August 1st, and November 21st, 1923.

PENCIL POINTS

AND our old contributor, Harry Lucht, sends in a little suggestion which he hopes will be useful to the young man who is striving for a place in the sun:

We are sending you herewith two examples whereby the existence of the architect is brought to the attention of the public who is so busy following the advertising of every one directly and remotely connected with home building that the architect's being is never thought of, nor realized.

We pass this on to the young architect who is breaking into the ranks of the profession, struggling with residence work before reaching the top notch of the ladder with a few Woolworth Building commissions up his sleeve, but before becoming thus world renown must realize any and all means to call attention to his work.

We believe the following effective and will appeal owing to its simplicity and low cost.

Small cardboard models are assembled and placed in the windows of realtors, builders, financiers and other agents who are glad to receive them owing to the attention they attract in their show window or office and sooner or later a commission results from one after the other.

Now then, models as we understand them are not inexpensive or easily made to distribute right and left. So we overcame the difficulty as follows:

On a sheet of tracing cloth the front and side of a residence is drawn in ink, roof, etc., all as shown. As the front is the thing, we do not draw any rear, merely duplicating same later in assembling.

Lithoprints are then made on cardboard, the design cut out and fastened together with common stationer's brass paper fasteners. A complete model for a few cents! Once the tracing is made any number can be had and without the expense of printer's zinc line cuts or any plates.

We have also made up other designs drawing the roof separate from the walls and then having the wall designs printed on buff cardboard and the roof on green cardboard, thereby having a colored model complete. On the former the roof was given a brown water color wash, the walls left white.

Of course these are not to be compared to a carefully detailed architectural model but they serve the purpose remarkably well, attract attention and cost the architect a few cents apiece, welcome where they can do him good.

The other is a further utilization of the lithoprint process. Ninety-nine times out of a hundred wherever one may see an attractive residence or any other type of structure in process of erection one will note a tremendous sign informing us that so and so is the builder and contractor, another tells us who is installing the plumbing and heating system, who is scraping the floors, who the sheet metal worker is, who sold the lot and so on, but not a word about the architect, leading one to believe his part of the operation is not worth telling about or listing. This sort of "ethical" modesty certainly is not good common business

sense and of course we can appreciate the architect may not prefer to be classified with such company. Nevertheless these are the fellows who are making money and success such as it may be in the building line. The architect should assert himself or remain being considered an incidental by the public.

Now and then a very small sign, though rare, is seen on a structure stating in small fine type so and so is the architect but is not noticed due to the "flaming", though crude, signs of the trades which claim and hold all attention. Or a blue print is tacked on the builder's shed, washed out by the first rainstorm or bleached out by a few clear sunny days' rays.

Like the models, this is overcome with small cost. Draw or letter your sign on tracing cloth and have it lithoprinted on white cardboard. We send a small cut of one we use which measures 18" square, it can be made smaller or even larger. We have in the past used an artistic sign with a decorative architectural design, however, we have found that some bold architectural lettering is best, as a sign merely, for decorative art work is not noticed by passers-by who have too much to divert their attention on a new job. Of course expensive signs could be enameled on metal or painted on wood, but signs about a building do not stay there long, and these can be replaced as often as necessary at little cost.

Cordially yours,

Harry Lucht.

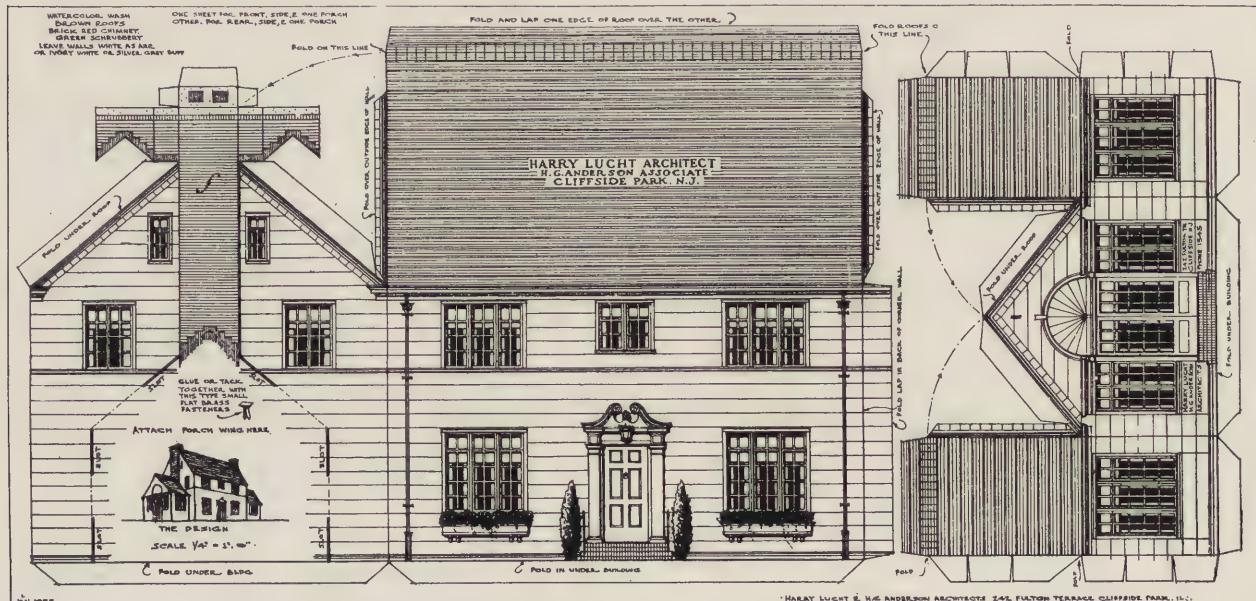
I also enclose "pictures" rendered on tracing cloth, though not a desirable medium, which permit making good black and white lithoprints which are tacked up in offices where models are placed, another form of making the architect known, as they are rendered in a style appealing to the public requiring little skill, time and effort, and cheaply reproduced.

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(Other items on pages 102 and 122)

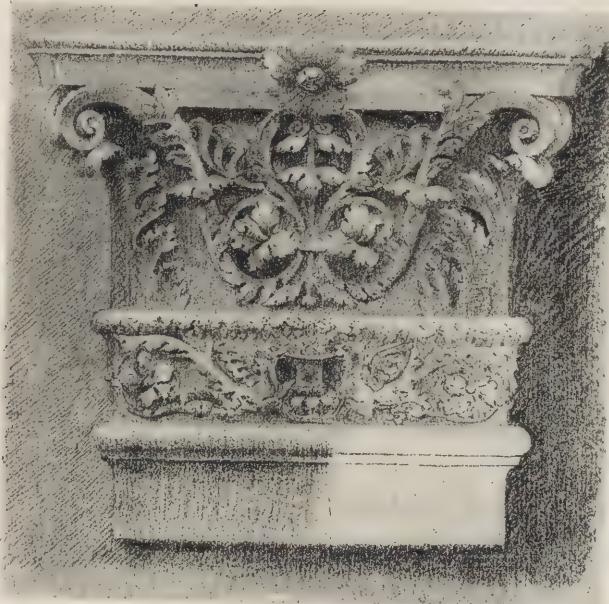
Wanted: Architectural draftsmen, first class men on apartment and hotel work. Reply giving experience, salary and references. Detailers & Designers particularly. Emery Roth, 119 West 40th Street, New York.

I have had seven years' experience in drafting, can develop plans complete with details from sketches; have designed two churches, several garages, many residences, one apartment building, some hotels, and a great many schools; besides I have worked in banks, office buildings, warehouses, have made several store buildings and in fact, I have had a varied experience in several drafting rooms and can give proof of my satisfaction by letters from the different Architects I have worked for since 1918. I can make Perspectives and Render in Pen and Ink and also Water Color. Box 104, Pencil Points.



One of Mr. Luchi's Drawings Used for Making a Model.

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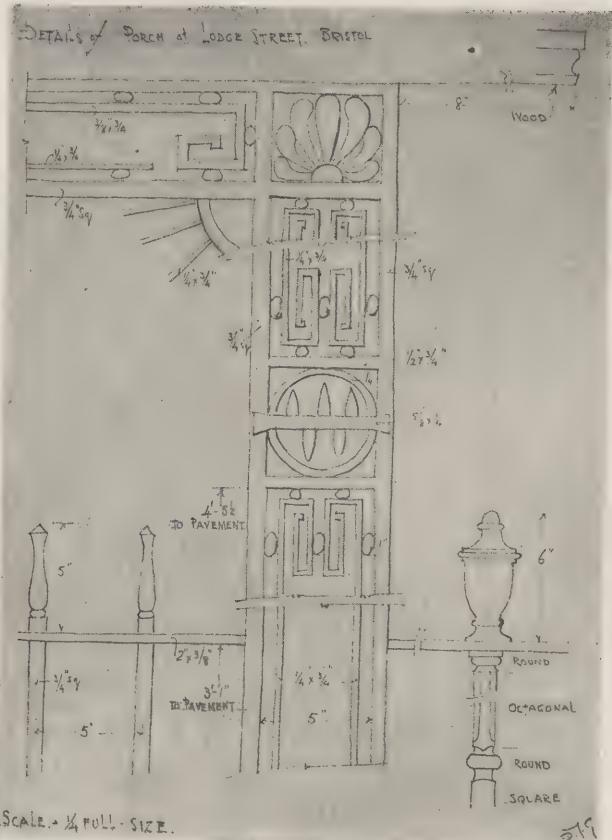
Pencil Drawing by A. Giglio, New York.



Rendering by Andrew Egeressy, New York.



Pencil Drawing by Albert Graeser, New York.



Measured Drawing by R. Tilsley Green, London, England.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS By W. W. BEACH PART VIII. GENERAL CONDITIONS

THE following General Conditions may be assumed to be component parts of the complete specifications of one of the most common of our American products, the public schoolhouse.

The first page of such a specification will be the title page and should contain also Art. 1 of the General Conditions. All the remaining articles of this division are eventually standardized and furnished in printed form, thus leaving only the first page to be specially prepared for each job.

Our title page takes form thus:—

SPECIFICATIONS
for the
GENERAL CONTRACT
for a
PUBLIC SCHOOL BUILDING
to be Erected
at the
SOUTHWEST CORNER OF
FOURTH AVENUE AND SOUTH TENTH STREET
EAST MILLVILLE, P. M.

John Smith Jones, Architect, Date of Issue,
First National Bank Building, May 1, 1925.
Millville, P. M.

DIVISION A, GENERAL CONDITIONS

ART. 1. SCOPE OF WORK.

(A) THE ITEMS in this contract include all labor, equipment, materials and transportation necessary to construct and complete the following Divisions of the work comprised in the construction of a new Consolidated District School Building to be erected upon the property of the Consolidated Independent District of the Town of East Millville, State of P. M., Viz:

(Here follows list of Divisions to be included
in General Contract).

(B) OMISSIONS. The following Divisions of the work are not included in this contract:

(Here follows list of Divisions to be omitted
from the contract).

It is important at the outset that the exact meaning of all words of special application used throughout the Contract Documents be made absolutely clear. This is cared for in Art. 2 under the head of "Fundamentals."

Next follows Art. 3, "Contract Documents," completely setting forth all members and phases of same. Architects should pay special attention to the identification by both parties of all contract documents and also to the voiding of all superseded drawings, if they would evade the probability of later trouble.

Identified copies of drawings and specifications should be deposited in the architect's vault for safe-keeping. Each party to the contract should keep an original of that document and the architect should possess an additional copy for his own reference.

Further paragraphs of these general conditions are more or less self-explanatory. The majority have been in common use in one form or another since architects were architects. In our wording we have endeavored to adhere to the simplest expressions in the fewest words possible in each case, and yet say all that's necessary on each subject.

Art. 5, treating of "The Architect's Relation to the Work," is stated in a manner which the author believes unique, yet which more accurately expresses such status than has been done in other forms. The paradoxical position of the architect in the dual capacity of owner's agent and unbiased arbiter between owner and contractor is here done away with and a sensible situation developed through the means of automatically changing his relationship simply by the action of the two parties signing the contract.

Another ambiguity is avoided by eliminating all assertions to the effect that the architect "shall do" so-and-so. Not

being a party to the contract, that document is powerless to compel him to such performances.

Paragraph C of Art. 5 makes it necessary for the architect to be specific as to the authority vested in his representatives, an important feature too often overlooked.

Art. 7 on "Sub-contracts" is made intentionally brief, inasmuch as the owner's dealings are essentially with his direct contractors. The less he must have to do with those contractors' "subs," the better. A multiplicity of instructions for the contractor's guidance in dealing with his subs simply leads to the ignoring of all such mandates and restrictions.

This is true likewise of instructions as to arbitration. Too much inserted on this subject weakens the position of the architect, hence it is properly left to a brief paragraph in the contract form where it belongs. Experience teaches that arbitrators are extremely liberal in their courses of action as well as in their decisions. The two points of importance anent arbitration are to get the arbitrators to make decisions and to get the two parties at issue to abide by those decisions.

The clauses relating to insurance are likewise brief, yet sufficient. They contain two unusual features. One is that (in lieu of other appointee) the architect shall be the adjustor in case of fire-damage and shall receive special remuneration for his services in such capacity. The other, that the fire insurance shall cover tools and equipment on the premises. Those having their belongings in the service of the owner are entitled to such protection. The premium cost is nil.

Introduction of an article on "Tests" is deemed advisable because of the vague manner in which this important subject is too often handled.

In the matters of extras, deductions and certificates for partial payments to contractors, the judgment of the architect is given more play than is customary. The exactions of estimates from contractors is done away with. This justly puts more burden upon the architect but it makes his overpayment of the contractor less likely.

Such features as the invitation to bid and all mention of certified check and bond are omitted as belonging rather to the advertisement than in the specifications. Items of office shanty at the job, as well as other temporary structures, special conditions, etc. are cared for under the head of "Supplementary General Conditions" immediately succeeding these "General Conditions," the standardized body of which here follows:

ART. 2. FUNDAMENTALS.

(A) THE TERM "OWNER" shall be understood to mean the Person, Persons or Entity whose name appears as such in the Contract and whose signature is attached to same.

(B) THE TERM "ARCHITECT" shall mean the one so named in the Contract.

(C) THE TERM "CONTRACTOR" shall mean the one whose name is affixed in that capacity to the Contract Documents, whether an Individual, Co-partnership or Corporation.

(D) THE TERM "SUB-CONTRACTOR" shall include all those having direct contract with the Contractor to furnish work for this construction.

(E) THE TERM "WORK" shall be construed to include either labor or materials or both.

(F) THE TERM "APPROVED" applied to any work signifies that the Architect shall be consulted as to the source from which such material is purchased, as well as to its general quality and construction, but such approval will not imply the acceptance of the material so provided if later found to be defective.

(G) TRADE NAMES or technical terms of common usage shall be construed to mean such recognized items or conditions.

(H) TIME is of the essence of this contract and all time limits mentioned shall be strictly adhered to by the Contractor.

(I) WRITTEN NOTICE may be served upon the Contractor by being delivered in person or by registered mail.

ART. 3. CONTRACT DOCUMENTS.

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(A) THE DOCUMENTS constituting the Contract consist of:

(1) THE CONTRACT, copy of which is hereto attached.

(2) THESE SPECIFICATIONS, complete.

(3) THE WORKING DRAWINGS, as elsewhere listed.

(4) ALL ADDENDA, modifications and special interpretations incorporated in the aforesaid Documents before the signing of the Contract.

(B) ADDENDA. The contractor, before signing the Contract, shall satisfy himself that all additions, deductions and special interpretations pertaining to same, whether arranged by specific addenda or by letters of instruction or by other explanation are properly listed and described and signed by both Parties to the Contract.

(C) IDENTIFICATION. The Contract Documents shall be signed in duplicate by Contractor and Owner, but, in case any of same (other than the Contract) be found to lack such signature, the identification of the Architect shall be deemed sufficient and conclusive.

(D) DIVISIONS OF SPECIFICATIONS. For convenience of reference and to facilitate the letting of independent contracts, these Specifications are separated into certain Branches or Divisions. Such separation shall not operate to oblige the Architect to establish the limits of any contract between the Contractor and a Sub-contractor, each of whom shall depend for same upon their own contract stipulations.

(E) GOVERNING FACTORS. Dimensions figured on drawings shall be followed in every case in preference to scale. Detail drawings shall take precedence over drawings of smaller scale.

(F) DISCREPANCIES. The Contract Documents are complementary and anything called for by one shall be supplied the same as if called for by all, providing it comes clearly within the scope of the Contract. Should the Contractor, at any time, discover a mistake in a drawing or specification or any discrepancy therein, or any variation between dimensions on drawings and measurements at site, or any lacking of dimensions or other information, he shall report same at once to the Architect for correction and shall not proceed with the work affected thereby until such correction has been made.

(G) SCOPE OF DRAWINGS. The drawings shall be held to determine the general character of the work as well as details of same. Parts not detailed shall be constructed in accordance with best standard practice for work of this class, so as to afford the requisite strength and logically complete the parts they compose. Where it is obvious that a drawing illustrates only a part of a given work or of a number of items, the remainder shall be deemed repetitions and so constructed.

(H) COPIES of Drawings and Specifications will be furnished to the Contractor without cost to him and in sufficient number to enable him to carry out the work efficiently and economically. He shall retain a complete copy of Drawings and Specifications in his office at the building available at all times, until work is finished, to the Superintendent and others needing to refer to same.

(I) OWNERSHIP of Drawings and Specifications and of all copies of same remains vested in the Architect and none may be used for work other than herein intended. The Contractor will be charged with all copies delivered to him and will be credited with same upon their return.

(J) VOIDED DRAWINGS. The Contractor will be required to receipt for copies of revised Drawings and shall thereafter be responsible for all errors made in using superseded Drawings.

ART. 4 SUPPLEMENTING THE CONTRACT DOCUMENTS.

(A) ADDITIONAL INFORMATION to that given by Drawings and Specifications will be supplied by the Architect from time to time as the work progresses. All such information, by means of drawings or otherwise, shall be truly consistent with the Contract and the work shall be executed in conformity therewith. If lacking any such needed information, the Contractor shall make timely application for whatever is necessary and shall, in no case, proceed without clear knowledge of the intent of the Contract.

(B) MINOR ALTERATIONS may be ordered by the Architect in connection with the supplementary information described in the preceding paragraph, provided that no

change in cost is involved. Changes involving extras or deductions in the contract price are treated in another Article of these General Conditions.

(C) SHOP DRAWINGS, setting diagrams, schedules, Maker's specifications and illustrations requisite for the various parts of the work shall be promptly submitted by the Contractor in each case. These shall be in duplicate, shall be corrected if necessary and re-submitted until approved by the Architect, after which two corrected copies of each shall be filed with him and the necessary additional copies supplied for use in connection with the work. The Architect's approval in such instance does not make him or the Owner responsible for errors in documents nor for any other unauthorized deviation from the terms of the Contract.

(D) MODELS of ornament shall be submitted for approval, if called for. These shall be made of plaster-paris or other acceptable medium by experts selected or approved by the Architect. Changes shall be made in the models until same are acceptable to the Architect, after which duplicate photographs of the accepted models shall be filed with him. Finished ornament shall be equal in every respect to the approved models. Models for which a stipulated price is named shall be the property of the Owner, shall be carefully preserved and delivered as directed when the work is finished.

(E) SAMPLES of materials and work shall be submitted as directed for approval of the Architect. All work for which samples have been approved shall conform thereto. Samples will be returned to the Contractor on demand when the work is finished.

ART. 5. THE ARCHITECT'S RELATION TO THE WORK.

(A) PRIOR TO THE EXECUTION OF THIS CONTRACT, the Architect is employed by the Owner to act as his Agent in the preparation of Contract Documents and the awarding of contracts thereon.

(B) AFTER CONTRACT IS SIGNED, the Architect is assumed to be a just and unbiased Arbitrator between the Parties thereto. The entire work is under his jurisdiction to such end. It is his function to interpret the drawings and specifications; pass upon the merits of materials and workmanship, compute amounts of and issue certificates for all payments to which the Contractor may be entitled; decide upon all deductions from and additions to the contract price resulting from alterations after letting of contract; determine amount of damages accruing to either Party from any cause; and perform any other duties hereinafter stated to be within his province.

(C) SUPERINTENDENTS AND INSPECTORS may be appointed by the Architect to assist him in the conduct of the work. These shall be entitled to the same free access to all parts of the work as is the privilege of the Architect but the degree of authority of any such Employee to act for the Architect shall be as prescribed by definite instructions over the Architect's signature. Without such written instructions, it is assumed that Superintendents and Inspectors have authority only to watch the work and report to the Architect. The Contractor will accept orders and interpretations from them only at his own risk.

(D) ORDERS FROM THE ARCHITECT will be in writing only, properly signed. No oral orders from the Architect nor from anyone acting for him will be considered binding, in case of dispute. No one, other than the Owner, or the Architect acting for him, has authority to order changes involving extras or deductions.

(E) AUTHORITY TO STOP THE WORK is vested in the Architect and may be invoked whenever he deems such action necessary to insure the proper execution of the Contract. The work may not thereafter be resumed until the Architect has given written consent.

ART. 6. RESPONSIBILITY OF CONTRACTOR.

(A) SUPERVISION. The Contractor shall give efficient supervision to the work, using therein the skill and diligence for which he is remunerated in the contract price. He shall carefully inspect the site and study and compare all drawings, specifications and other instructions, as ignorance of any phase of any of the features or conditions affecting the Contract will not excuse him from carrying out its provisions to its full intent.

(B) PROGRESS OF THE WORK. It shall be the duty of the Contractor to watch the progress of the work and to determine when and where his materials and labor will next be needed. Neither the Owner nor the Architect engages

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to notify Parties when to begin work or to have material in readiness, nor to give early notice of work rejected, nor in any way to so supervise the work as to relieve the Contractor of responsibility or of the consequence of neglect or carelessness on the part of the Contractor or his Subordinates.

(C) FOREMEN. The Contractor and Sub-contractor shall, during the progress of their work, keep thereon competent Foremen and their necessary Assistants, all satisfactory to the Architect. The Contractor's General Foreman shall have full authority to answer all questions and to receive and carry out all instructions of the Architect or those authorized to act for him. All such instructions shall be as binding as if given direct to the Contractor.

(D) SKILLED LABOR. All labor shall be skilled in its particular craft (where skill is required) performed by the Workmen in a thorough, faithful, workmanlike manner to the best of their ability. The Contractor shall promptly remove any Workman or other Person to whom the Architect may object.

(E) ASSISTANCE TO ARCHITECT. The Contractor shall render all necessary assistance to the Architect and his Representatives in inspecting the work and in taking measurements, levels, etc., at the site.

ART. 7. SUB-CONTRACTS.

(A) LIST OF SUB-CONTRACTORS. As soon after the execution of the Contract as is practicable, the Contractor shall submit to the Architect a written list of his intended Sub-contractors and shall not employ nor retain on the work any to whom the Architect may object, and all dealings with Sub-contractors shall be understood to be subject to this proviso.

(B) CONTRACTOR'S OBLIGATION. The Contractor shall be fully responsible for acts and omissions of his Sub-contractors and their Employees and all others engaged upon any part of the operations under this contract.

(C) OWNER'S RELATION. Neither the acceptance of the name of a Sub-contractor nor the suggestion of such a name nor any other act of the Architect nor anything contained in any Contract Document is to be construed as creating any contractual relation between the Owner and any Sub-contractor.

(D) RELATION OF CONTRACTOR AND SUB-CONTRACTOR. The Contractor shall bind every Sub-contractor and every Sub-contractor undertaking any part of the work is thereby bound to this Contractor by the terms of the Contract Documents to carry out the provisions of same insofar as they appertain to that part of the work undertaken by such Sub-contractor. The Contractor further agrees to pay to each Sub-contractor, promptly upon issuance of certificate payments, his due proportion of same.

ART. 8. MATERIALS AND APPLIANCES.

(A) FACTORS INCLUDED. Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, hoists, transportation, light, heat and power necessary in the carrying out of this contract.

(B) ALL MATERIALS, unless otherwise specified, shall be new, and both workmanship and materials shall be of good quality, proof of which shall be furnished by the Contractor, if demanded by the Architect. In case of doubt as to the kind or quality required, appeal shall be to the Architect and samples submitted, if he so requests. The Architect will direct the use of a material appropriate to the location and function of the item in question and the Contractor shall furnish same accordingly.

(C) ITEMS OF SPECIAL MAKE. Whenever an article or class of material is specified by trade name or the name of a particular Maker or by catalog reference, it is intended to mean either the article so described or any similar item which, in the judgment of the Architect, is equal thereto in every respect.

(D) SUBSTITUTIONS for specified items, as stipulated in the foregoing paragraph, may only be made after a written order from the Architect approving same has been obtained well in advance of the time such item will be needed. In no case will an item other than is specified be considered, if brought to the site without previous written permission. The Contractor may also submit for consideration, or may be invited to submit, items similar to certain of those specified but of different value. If the substitution of any such be approved by the Architect, the amount

to be added or deducted is to be agreed upon and order issued for same as provided in Art. 13.

(E) PROPRIETARY ITEMS. The Contractor shall pay all royalties and license fees incidental to the use of any patented material, device or process. In event of a claim being made for alleged infringement of patent rights, the Contractor shall save the Owner harmless from loss on account thereof and shall also defend, at his own expense, any suit that may be brought in such connection.

(F) ALL CASH ALLOWANCES named in these specifications shall be included in the contract price and shall be held to cover the net cost to the Contractor of the work so specified, either f. o. b. cars at a certain point, or delivered at the site, or completely installed, as may be stated. If the purchase price of such work varies from that named, the Architect will make proper adjustment and issue an order accordingly, stipulating the amount to be added to or deducted from the contract price. Purchases under cash allowances shall be made only as directed by the Architect.

ART. 9. REGULATIONS.

(A) PERMITS AND LICENSES. All permits, fees and licenses necessary to this work shall be obtained and paid for by the Contractor who shall also give all required notices and comply in every way with all laws and ordinances relating to the work.

(B) VARIATIONS. Should the Contractor discover any variation between the drawings or specifications and any law, ordinance, governing rule or regulation, he shall promptly notify the Architect and secure definite instructions in writing. If the Contractor performs any work knowing it to be contrary to laws, ordinances or regulations, he shall bear all costs incidental to its correction.

(C) PROPERTY CONFINES. The Contractor shall limit the storage of materials and the operations of his Employees to confines indicated by law, ordinances, permits or the direction of the Architect and shall not unduly encumber the site with materials nor infringe upon storage space assigned to others. The Contractor has no authority to permit the use of any portion of the premises by anyone except for business connected with the construction in which this contract is concerned.

(D) LOADING. The Contractor shall not permit any part of the structure to be loaded to such an extent as to endanger it. Materials may not be stored inside the building without proper authority.

(E) SIGNS AND ADVERTISING. No permanent or temporary labeling, trade mark, sign or other advertising may be exposed on or about the premises without express permission of the Architect, except that Makers' removable marks of identification may remain on their product until ordered removed by the Superintendent.

(F) NO NUISANCE may be committed anywhere about the premises. The Contractor shall cooperate with local authorities in enforcing this provision and in preventing fires or smoking at times when damage might result therefrom. The use of tobacco about interior carpentry or finishing work will not be permitted.

ART. 10. FITTING AND REPAIRING.

(A) CUTTING AND REPLACING. All cutting and fitting of the work shall be done by this Contractor as may be necessary to fit to, or be fitted by, the work of others, and without additional cost to the Owner, provided that such work is shown by drawings or reasonably inferable therefrom. This Contractor shall also properly patch or repair and make good after such cutting to the satisfaction of the Architect.

(B) RESTRICTIONS. The Contractor shall do no cutting of the work of other Contractors (except on special order of the Architect) nor permit any cutting, digging or similar effort which might tend to damage the strength or appearance of any finished work. Men of each trade only shall be employed to do the cutting and repairing of work peculiar to that trade and none shall be done by inexperienced men. No repairing or patching may be done except by specific instruction and the finished work of all repairing and patching shall be so executed as to be a proper part of the whole, with no joinings or other defects apparent.

ART. 11. PROTECTION AND DAMAGES.

(A) ADEQUATE PROTECTION for all parts of his work shall be maintained by the Contractor against injury due to weather conditions, frost, accident or other cause and he shall also protect the Owner's and other adjacent prop-

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erty from injury occurring in connection with operations under this contract, as provided by law and the Contract Documents. He shall make good, at his own expense, as a part of this contract, all damages resulting from any such causes or lack of protection.

(B) SAFEGUARDS. The Contractor shall provide and maintain all barricades, guards, lights, danger signs and protection members required for safety or by the Public Authorities, whether or not more specifically called for herein. (C) SHORING. The Contractor shall provide all permanent and temporary bracing, shoring and anchoring that the nature of his work may require in order to make everything absolutely stable and secure, even where such bracing, shoring and anchoring are not explicitly called for, and he will be held strictly accountable for any damage resulting from failure to furnish same, either through lack of proper judgment or for any other cause.

(D) INCLEMENT WEATHER. Should the weather be unusually cold, wet or stormy so that certain exterior work cannot be done in proper manner, then the Architect may order such work suspended until a more suitable time, in which case, the Contractor shall cover and protect the existing work from injury until operations are resumed.

(E) WORKMEN'S COMPENSATION INSURANCE. The Contractor shall carry insurance acceptable to the Owner, providing compensation for accidental injuries or death to any of his Employes, occurring in the course of employment on this work or on materials being prepared for use in this work, and shall compel each of his Sub-contractors to carry similar insurance, all in strict compliance with State laws and to fully protect the Owner from any claims arising out of accidents on the work.

(F) FIRE INSURANCE. The Owner will maintain fire insurance in his own name and in those of others, as their interests appear, covering up to eighty per cent of the value of all work and material in the structure and all material on the premises for use in the work, also all tools and equipment on the premises in connection with these operations; payments under such policies, in case of loss, to be pro-rated among all those participating in such loss, under an equitable adjustment, the Architect acting as arbitrator and adjuster on behalf of all the Insured, unless the latter agree upon someone else to act for them. The Architect's fee for acting as such adjuster shall be that customarily paid for such service, reckoned on the total amount of insurance paid and deducted therefrom before distribution.

ART. 12. TESTING MATERIALS, ETC.

(A) TESTS shall be made by the Contractor of the operation of his mechanical equipment as required by law or as the safety of his Employees may demand. Tests shall also be made by him of his workmanship and material, if called for by these specifications, and in the manner therein stipulated or as directed by the Architect. Unless otherwise specifically stated, all expense attached to such tests, including the use of materials, labor, tools, instruments, power, light, heat and equipment, shall be borne by the Contractor.

(B) ADDITIONAL TESTS, not called for by the specifications, shall be provided by the Contractor under direction of the Architect at the expense of the Owner except that, in cases where such tests give evidence of defective materials or workmanship for which the Contractor is required to make replacements, then the cost of such tests shall be borne by the Contractor. The expense of such tests shall be carefully kept by the Contractor and will be audited by the Architect who, if same is to be charged against the Owner, will issue an extra order for the amount as provided in Art. 13.

(C) NOTICE OF TESTS shall be given by the Contractor to the Architect in due time to permit advising all those interested. No tests will be considered valid unless duly witnessed by the Architect or someone appointed to act for him. Tests shall also be witnessed by local authorities, if so demanded by ordinance.

(D) RECORDS of all tests, neatly typewritten on letter-size paper, accompanied by necessary diagrams or charts to thoroughly explain same, all in duplicate and duly certified and signed, shall be prepared by the Contractor at his expense and deposited with the Architect.

ART. 13. ALTERATIONS.

(A) CHANGES PERMISSIBLE. The Owner reserves the right to alter or modify the drawings and specifications

(other than contract copies) and the Architect may make any reasonable deviation in construction, detail or execution of the work without in either case, invalidating the contract. All such changes shall be executed in every other particular in accordance with provisions of the Contract Documents.

(B) WRITTEN ORDERS, properly signed, will be issued, explicitly setting forth all such changes. No change shall be made except by such orders.

(C) EXTRAS AND DEDUCTIONS. In case an authorized change will increase or decrease the cost of the work to the Contractor, a corresponding extra amount or deduction will be made to or from the contract price, as the case may be, and so stated in the order. The Architect shall be the judge (subject to arbitration) of what amount to be added or deducted is just and proper.

(D) THE VALUE of any such extra or deduction as described in the preceding paragraph shall be determined by one of the following methods:

- (1) By agreed estimate in lump sum.
- (2) By pre-arranged unit prices.
- (3) By reckoning cost, plus a percentage or fixed fee.

In the latter case, the Contractor shall keep record of net cost of labor and materials concerned in the change and submit same (with vouchers, where possible) under affidavit to the Architect, who will audit same, deducting savings, if any, and, if the amount is "extra," adding thereto not to exceed 15% of the net amount to cover Contractor's overhead and profit.

(E) ALL CLAIMS for extras by the Contractor shall be presented in writing before the expense is incurred and will be adjusted as above provided. No work shall be allowed to lag pending such adjustment but shall be promptly executed as directed, even if a disputed claim arises concerning same. If such dispute cannot be amicably adjusted, it shall be made a subject of arbitration as provided in the contract but shall, in no case, be permitted to cause delay in the work or damage to the Owner or to other Contractors. No claim will be considered after the work in question has been done unless a written order for same has been issued or a timely definite written request for same has been made as above provided.

ART. 14. INSPECTION OF WORK.

(A) APPROVAL. All work shall be subject to the approval and final acceptance of the Architect.

(B) ACCESS. The Architect, Superintendents and other Representatives of the Architect and of the Owner shall have access to all parts of the work at all times, either at the site or in places of preparation. The Contractor and his Sub-contractors and Supply Dealers shall, at any time upon request, provide proper facilities for such access and inspection.

(C) INSPECTION will either be by Persons directly employed by the Architect or may be (in the case of cement, steel and similar items), if so stated in the specifications, performed by an Inspection Bureau of recognized standing appointed by the Architect for the purpose under a "cash allowance" to be included in the contract price. Before any of the more important or special work is commenced, the Contractor shall notify the Architect regarding same and shall also give him due notice of the readiness of all work and materials specified to be inspected or approved before same are covered and also all other work and materials that should be so approved. All covering of same prior to inspection will be solely at the risk of the Contractor.

(D) EXAMINATION of work covered in place may be ordered in writing by the Architect, in which case the Contractor shall remove such construction as is necessary to uncover same. If the questioned work is found to be proper, the Owner will pay the cost of uncovering and replacement but, if same be found improper, it shall be replaced with proper materials correctly installed and the Contractor shall bear all expense in connection with same.

(E) ACCEPTANCE. Assent to the covering of inspected work shall not be held to be acceptance of same. No part of the work will be held to be accepted until the final acceptance of the entire contract, even for portions placed in use by the Owner, except when special acceptance is given in writing covering specific features, such as finished floors, equipment, etc.

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ART. 15. REJECTIONS AND CORRECTIONS.

(A) BEFORE FINAL PAYMENT, all materials rejected by the Architect shall be promptly removed from the premises by the Contractor, whether or not completely installed, and he shall promptly and properly replace same with correct materials, including any other of his work adjoining, if same has been disturbed, in accordance with the contract and without expense to the Owner. He shall also pay for making good such work of other Contractors as is affected by such removals and replacements.

(B) AFTER FINAL PAYMENT, the Contractor shall be bound by his guarantees, (if any are called for in the specifications) to promptly remedy any defects due to negligence or faulty materials or workmanship in the work so guaranteed and to pay for any damage to other work resulting therefrom.

(C) ALTERNATIVE. If condemned materials, furnished under this contract, be not removed within a reasonable time, the Owner may remove same, after 3 days written notice, and store at the Contractor's expense. If the Contractor does not pay for such removal and storage within 6 days thereafter, the Owner may, after 6 further days' written notice, sell same and will credit the Contractor with net proceeds after all costs have been deducted. If the materials so removed are valueless or the sale does not meet cost of removal, then the Contractor shall bear all resultant loss.

ART. 16. TIME AN ESSENCE OF THE CONTRACT.

(A) TIME OF COMPLETION shall be as stated in the Contract Documents. Possession of the premises for the purpose of carrying out the contract will be granted the Contractor in conformity therewith and he hereby agrees that such time limits are ample and that the work can and will proceed in accordance with the contract time schedule.

(B) EXTENSIONS. Failure on the part of the Owner to deliver the premises to the Contractor at the stipulated time will permit the latter a corresponding extension of each date in the time schedule, but such failure to secure the premises according to schedule will not be held a reason for rescinding the contract nor affecting the validity of same, nor shall it be considered any cause for a claim for damages against the Owner. Time will also be extended to offset delays occasioned by strikes, riots or other violence, conflagration or serious accident (unavoidable by the Contractor in each case), provided always that due and just claim is promptly made for each such extension.

(C) GENERAL PROCEDURE. The Contractor shall carry on the work in such parts of the building and in such order of precedence, and at such times and seasons as directed by the Architect. Where such directions are held by the Contractor to conflict with preceding paragraphs of this article or with other of his specific rights under the contract, he shall so notify the Architect and of the exact detail of procedure will be arranged. If an extension of time is thereby necessitated, same will be granted accordingly.

ART. 17. OWNER'S PRIVILEGES.

(A) THE RIGHT TO OCCUPY the whole or any portion of the building or premises at any time prior to completion of the contract is reserved by the Owner. It is understood and agreed that the right to so use same is a part of the contract and that the Contractor shall proceed with the completion of his contract in such event in a manner to cause the least possible interference with the Owner or his Employees or others having business on the premises. If such occupancy of the premises by the Owner, in whole or in part, prior to the time set for completion of the contract, is the cause of added expense to the Contractor in the pursuance of his work under the contract, such expense shall be carefully reckoned and will be audited by the Architect and an extra order issued for the amount justly due the Contractor on account of same; but no allowance will be made for such expense incurred after the time set for completion of the contract.

(B) OTHER CONTRACTS pertaining to this work may be let by the Owner as seen fit and without affecting this contract, it being understood that such other contracts are necessary to the completion of the building and ap-

purtenances and will, as far as possible, be carried on simultaneously and without mutual interference.

(C) ACCEPTANCE OF FAULTY WORK by the Architect is permissible in cases where, in his judgment, the best interests of the Owner are thus served, rather than causing delays or damage to other work by forcing the removal of the improper materials. In case such work is allowed to remain, the Architect shall determine the amount to be deducted for such saving, not exceeding the actual value of faulty material accepted.

(D) THE OWNER MAY PERFORM, or employ others to undertake, portions of the work persistently neglected by the Contractor, provided that, after three days' written notice to the Contractor, the work is still undone. In such case, the work shall be done under the direction of the Architect and the cost of same deducted from the amount of next payment falling due to the Contractor. Such action shall in no way affect the status of either Party under the contract, nor shall it be held the basis of any claim by the Contractor, either for damages or for extension of time.

ART. 18. CO-OPERATION.

(A) WITH OTHER CONTRACTORS. The Contractor shall co-operate with other Contractors on the job, as well as with the Owner and Architect, to the end that the whole construction and equipment shall be carried on and completed without hindrance or delay to anyone concerned.

(B) DELAYS. Should the Contractor be hindered or delayed by lack of cooperation on the part of others or by any other cause for which he is not responsible, he may, by reporting the matter promptly to the Architect, secure consideration for a claim, either for damages or for an extension of time, the same will be allowed, if found just. But no such claim will receive consideration unless reported within three days from the time of events upon which same is founded, nor will any such claim be valid for delays or damages accruing after the time set for completion of the contract, including extensions thereto.

(C) INTERFERENCE. In case the work of any other Contractor appears to interfere with the work of this Contractor, the latter shall, before the work of either is cut or altered, notify the Architect and shall secure a decision as to the mode of procedure or change in design or construction, before proceeding with same.

ART. 19. CLEANING PREMISES.

(A) DURING PROGRESS of the work the Contractor shall, at all times, keep the building and premises clear of rubbish, waste and rejected materials due to operations under this contract. Such materials, together with all items which, under this contract, are to be removed from the work to become the property of the Contractor, shall be promptly removed from the site and shall not be allowed to encumber other property, public or private, in the vicinity, unless specifically permitted by the Architect.

(B) AT COMPLETION of this contract, the Contractor shall remove all dirt, rubbish and surplus materials resulting from this contract and shall deliver the entire buildings and premises to the Owner in a clean and neat condition. Each room and every floor in the building shall be broom-clean, except in cases where the work of others is continuing to cause dirt or disorder after the work of this Contractor is completed.

(C) IN CASE OF NEGLECT of the Contractor to comply with the requirements of the two preceding paragraphs, or in case of dispute as to the cause or responsibility for unremoved rubbish, the Architect may have same removed without notice and the cost of such removing and cleaning pro-rated among the Contractors whom the Architect deems responsible. This Contractor hereby agrees to pay charges so assessed against him.

ART. 20. CONTRACTOR'S DEFAULT.

(A) ASSIGNMENT. The Contractor shall not assign the contract, nor any moneys due or to become due to him hereunder, to his Surety nor to any other Person, Firm or Corporation, without previous written consent of the Owner.

(B) DEFAULT. Should the Contractor become bankrupt (either voluntarily or involuntarily) or if he should persistently neglect to pursue the work in proper man-

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ner, or to make due payments for materials or labor furnished for the work, or repeatedly violate building ordinances, Architect's instructions or other express provisions of the contract, then and in such case it will be the duty of the Architect to so notify the Owner and the latter may, without prejudice to any other right or remedy and, after giving the Contractor seven days' written notice, take possession of the premises and complete the work in such manner and by such means as the Architect deems most expedient. In such event the Owner's forces will have the use of all materials, tools and appliances on the premises pertaining to this work at the time of the aforesaid notice and the Contractor shall not be entitled to remove any of same nor to receive any further payment until the work is finished. At that time, if the expense of completing the work has exceeded the unpaid contract balance, the Contractor (or his Surety) shall pay the Owner the excess, but, if a balance remains after all such expenses have been met, same shall be paid to the Contractor. The expense of such completion of contract, including all damages resulting from the Contractor's default, shall be included in the amount assessed against the Contractor, all of which will be audited and certified by the Architect.

ART. 21. PAYMENTS.

(A) CERTIFICATES will be issued by the Architect for partial payments to the Contractor at intervals stipulated in the contract and for such percentage of the value of the work then completed as the contract allows. No payment will be certified for materials other than those actually incorporated in the construction, unless specifically so stated in the contract. No certificate nor payment to the Contractor, other than the final, is to be considered evidence of the acceptance of any portion of the work; nor may partial or entire use or occupancy of the premises by the Owner be so considered or held. Acceptance of the final payment by the Contractor shall constitute a waiver of all claims by him.

(B) SCHEDULE. Each certificate shall represent the Architect's estimate of the amount due the Contractor. The Contractor may submit, for the assistance of the Architect in the preparation of such estimates, a complete schedule of the items of which the contract price is composed and the Architect will make use of same as his judgment dictates, or he may prepare and use his own schedule.

(C) APPLICATIONS for payments may be made by the Contractor at least 10 days before same are due, in which case the Architect will give them due consideration in preparing his estimates.

(D) PAYMENTS WITHHELD. Payment of the whole or a part of any certificate may be withheld if such course be deemed necessary to protect the Owner from loss on account of:

- (1) Failure of the Contractor to meet his obligations.
- (2) Failure of the Contractor to expedite the work.
- (3) Failure of the Contractor to correct rejected work.
- (4) Failure of the Contractor to settle damages as herein provided.

(5) Evidence of filing or probable filing of claims.

(6) Discovery that unpaid balance may be insufficient to complete the work.

Payments will be made promptly when the grounds for withholding same have been removed.

(E) WAIVERS OF LIENS may be demanded by the Owner as a pre-requisite for any payment, partial or final, if, in his judgment, it appears necessary to so protect his interests. The Contractor pledges himself to prevent the filing of any just liens and agrees that he will, if demanded by the Owner, furnish a bond guaranteeing the payment of any Sub-contractor or Supply-dealer in case of the refusal of the latter to file a waiver of lien. If any lien is left for the Owner to discharge when the work is completed, all costs of clearing same will be deducted from the amount of final payment to the Contractor.

THE DRY CELLAR

By OTTO GAERTNER

IT IS not the intention to go extensively into the water-proofing problem as there are too many various conditions to be met with in practice. It is, however, the intention to cover some simple cases and, if possible, to point out some of the minor conditions that are often overlooked by the architect's superintendent and specification writer. While the items mentioned may concern all types of buildings we have the residence type specially in mind. The most important thing in a residence is to have the cellar dry. While it is not always necessary to provide against water entering it, every cellar should be damp-proofed if possible. The general term *water-proofing* is often a misnomer. Much of the so-called water-proofing is in reality only damp-proofing.

To distinguish between the two it might be said that water-proofing provides against the penetration of water while damp-proofing provides against the penetration of dampness. In practice water-proofing is used to prevent the penetration of water with pressure behind it, while damp-proofing is used to prevent water seepage and dampness. Therefore, if an outlet is provided for the water in order to release the pressure, the problem becomes one of damp-proofing and is much more easily and economically solved.

Care must be taken to insure the permanence of the water outlet and to insure its being of ample size so that the water can never back up. Damp-proofing will not necessarily eliminate condensation unless some other provisions are made at the same time. Condensation generally takes place in warm, humid weather when the atmosphere is charged with dampness and the cellar walls are cold. Cellar walls above grade are apt to be warmed from the air on the inside and outside, but not so with the walls below grade where the earth keeps the wall cool on the outside and the cellar air is not warm enough for the heat to penetrate the wall. The condensation generally occurs below grade and near the floor. Consequently it is often mistaken for water penetrating the walls. The only way to overcome this condition is to build a double wall or one having air cells in it, or to furr the inside of the wall with terra cotta blocks and cover them with plaster.

There seems to be a tendency to neglect the construction of the cellar, especially in houses of moderate cost, even though the construction of the cellar is more important than that of the superstructure. Sometimes the water and damp-proofing part is neglected until the building is completed. Although the finished work can be water-proofed or damp-proofed, it can not be done so economically or so easily as when it is done earlier in the proper sequence during the operation. The prevalent idea seems to be that if there is no water or any sign of any in the excavation, a dry cellar is insured. That is particularly the case when the excavation is on the side of a hill and it is assumed that the water will find its own level at a place somewhere below the level of the excavation. But this is not necessarily the case. The situation should be studied from every angle. An excavation made during the summer when the weather is dry, might disclose a spring during a period of wet weather at another time of the year.

Then again, spring thaws and wet weather might turn an adjoining depression, which generally passes unnoticed, into a pond or brook, especially if the water from a considerable area drains toward this low area. The water from such a low area may readily find its way to the foundation walls of the house. Also, when the land on which the house is built is low ground, not properly drained and saturated by spring rains, the water will not seep away rapidly and will lie around the foundation walls, gradually penetrating them and appearing on the inside. If there is water in the excavation it may not be due to the recent rain storm, nor may it have come from a broken water main. It may be an accumulation of surface water which, on account of the nature of the heavy impenetrable clay soil, can not soak away and disappear as readily as it should. This should be taken account of when grading around the building, taking care to grade the earth well away from the building and not toward it.

All roofs should be provided with gutters and leaders,

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and the water from the leaders should be properly disposed of. The leaders should be connected with pipes leading to sewers or to dry wells located at least fifteen feet from the walls of any building having a cellar. Dry wells should be specified of ample size to hold the water precipitated during a heavy storm without backing up. The piping leading to the dry wells should be laid with tight joints. The walls and floors of the dry wells should permit the water to seep away rapidly. If dry wells are not provided the pipes from the leaders should lead to lower ground or at least several feet away from the building walls so that the water will flow away if possible and not find its way against the foundation walls and so seep into the cellar.

In outlying districts where rain water is conserved in cisterns, the cisterns should be watertight so that the water can not leak through the wall and find its way to the foundations of the house. Cisterns should be at least fifteen feet from the building. Sometimes a broken water main, a backed-up sewer, or a flood may cause water to find its way to the cellar walls and into the cellar. Such conditions are remote and unusual and can not be foreseen. If they do occur, they are only temporary but may do much damage. Such damage may be avoided if the precaution is taken to water-proof the cellar although there is no apparent reason for doing so.

(To be continued)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Studies in Granite.—Portfolio of 18 drawings of the greatest value to architects and designers, printed on heavy plate paper. National Building Granite Quarries, Assn., 31 State St., Boston, Mass.

Norton Floors.—Loose-leaf portfolio with one color plate and 27 pages of drawings and specifications, covering stair treads and various types of floor construction suitable for a wide variety of uses. Standard filing size. Norton Company, Worcester, Mass.

Roof Standards.—Book of blue prints illustrating the application of pre-cast reinforced granite slabs to all types of roof construction. 26 pp. of detailed drawings with space for memoranda. 8½ x 11. Federal Cement Tile Co., 608 South Dearborn St., Chicago, Ill.

Cove Lighting.—Illustrated brochure with detail drawings, directions for installing and complete technical data on the lighting of many types of buildings and rooms by means of this modern system. 30 pp. 8½ x 11. Pittsburgh Reflector Co., Pittsburgh, Pa.

Sliding and Folding Partition Door Hardware.—Catalog No. 40. Handbook completely covering subject with detail drawings and specifications on subject indicated. 36 pp. 8½ x 11. Richards-Wilcox Mfg. Co., Aurora, Ill.

Published by the same firm. Big Door Hardware for Round Houses and Freight Houses. Catalog No. 41 covers completely in drawing and text equipment for heavy doors suitable for all transportation and industrial uses. 24 pp. 8½ x 11. Bulletin No. 766 describes "Holdtite" Stair Rail Bracket, a specialty which will be found useful under many conditions. Standard filing size.

The Book of Vermont Marble.—2nd edition. A reference book for the architectural profession. Profusely illustrated with fine examples of marble work, construction details and much other useful information for the draftsman and architect. 70 pp. 9½ x 11. Vermont Marble Co., Proctor, Vt.

Mueller Tile.—Illustrated brochure showing architectural faience, polychrome panels, Flemish Hand-Made Tile, Norman Flash Mosaic and other ceramic products. 48 pp. Mueller Mosaic Co., Trenton, N. J.

Beautiful American Gum Wood.—Brochure with color plates showing adaptability of this American wood for all types of furniture. 24 pp. Hardwood Mfrs. Inst., Memphis, Tenn.

Zenitherm.—Folio in sepia showing application of Zenitherm, the universal building material, for all types of service. Detail drawing and complete data. 8½ x 11. Zenitherm Company, 405 Lexington Avenue, New York.

Excluding Cold and Dust.—Illustrated booklet interestingly describing application of modern weatherstrip equipment for comfort and economy. 20 pp. 5 x 7½. Chamberlin Metal Weather Strip Co., 1644 Lafayette Blvd., Detroit, Mich.

Painting and Decorating Cypress.—Booklet of instructions covering the painting of Cypress lumber to secure the best results. Southern Cypress Mfrs. Assn., Poydras Bldg., New Orleans, La.

Inks and Adhesives.—Handy little booklet with frontispiece showing Charles Dana Gibson at work, covering many interesting matters on the subjects of inks and adhesives. 32 pp. Chas. M. Higgins & Co., 271 9th Street, Brooklyn, N. Y.

Batchelder Tiles.—Portfolio of detail drawings and designs showing mantels and other tile features. Batchelder-Wilson Co., 2633 Artesian St., Los Angeles, Calif.

Sunfast Finish.—Booklet in full colors setting forth the qualities and uses of a new line of finishes. Bishoprinc Mfg. Co., 110 Este Ave., Cincinnati, Ohio.

Kohler Village.—Attractive book illustrated in full color from paintings by Arthur Covey showing the development of an unusually interesting community. Many small houses are illustrated together with complete plan and many interesting details. 50 pp. 8½ x 11. Kohler Co., Kohler, Wis.

Walstrom.—Booklet describing qualities of this new product, the mortar for covering the exterior and interior surfaces of walls. Louisville Cement Co., Louisville, Ky.

Single Pipe Vapor Heating System.—Booklet describing this type of equipment with diagrams, layouts and other data. Gorton & Lidgewood Co., 96 Liberty St., New York.

For Comfort and Economy.—Booklet describing Flax-Li-Num, an insulating material, together with sample of the material itself. L. E. Newport, 30 East 42nd St., New York.

Majestic Steel Cabinets.—Data sheet with 12 detail drawings and photographs showing medicine cabinets, kitchen cabinets, in-a-wall tables and other space saving appliances. Majestic Steel Cabinet Co., 4223 Belle Plaine Ave., Chicago, Ill.

Radiator Traps.—Booklet dealing with traps and a line of heating specialties applicable to vapor, vacuum and low pressure heating systems. Technical data for the engineer and specification writer. Sarco Co., 234 Broadway, New York.

Ever Hot Water Heater.—Data sheet describing and illustrating a line of tank waterheaters suitable for many uses. EverHot Heater Sales Co., 200 W. Woodward St., Detroit, Mich.

Honeycomb Bottleracks.—Data sheet showing proper way of storing wines, liquors and other beverages. Herman Soellner, 277 Lafayette St., New York.

The Miller Plan.—Brochure describing Muller system of financing building operations. 20 pp. 8½ x 11. G. L. Miller & Co., 30 East 42nd St., New York.

Goodyear Rubber Tile.—Brochure illustrated with plates in full color and blue prints, and containing complete specifications on rubber tile flooring. 16 pp. 8½ x 11. Goodyear Tire & Rubber Co., Akron, Ohio.

Interior and Exterior Decoration.—Portfolio with plates in full color showing color schemes and decorative treatment for all the rooms of a residence, also two exteriors. 24 pp. 8½ x 11. Benj. Moore & Co., 231 Front St., Brooklyn, New York.

Atlantic Terra Cotta.—Monthly publication for architects and draftsmen. Volume 7 No. 9 treats of modeling and shows many details of ornament in various styles. Atlantic Terra Cotta Co., 350 Madison Ave., New York.

Flooring Specifications.—Four separate documents covering cork tile, rubber tile, Treadlite Tile and Battleship Linoleum. Each is accompanied by necessary drawings. Bonded Floors Co., 1421 Chestnut St., Philadelphia, Pa.

Ravenna Mosaics.—Illustrated brochure on the subject of mosaics. Hand pocket size, 42 pp. Ravenna Mosaics, Inc., 101 Park Ave., New York.

School Lighting.—Booklet on the subject indicated prepared by the engineering department of the National Lamp Works, Nela Park, Cleveland, Ohio.

Ars Ecclesiastica.—Brochure showing a large number of examples of wood carving as applied to church furniture and embellishment. 48 plates. 8½ x 11. American Seating Co., 1091 Lytton, Chicago, Ill.

Build the Castle of Your Dreams.—Booklet on the subject of the small house, profusely illustrated with examples of various types, with floor plans and details, together with a discussion of textures suitable for both exterior and interior use. 32 pp. 8½ x 11. Lehigh Portland Cement Co., Allentown, Pa.

E-S Bulletin.—Special exposition number. Deals with all matters pertaining to the modern elevator, its operation, including signal systems. Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. J.

Portfolio of Specification Data.—Covers floor treatments, dampproofing and waterproofing, interior and exterior painting and technical paints for all uses. Complete specifications of all products and data concerning their application. Standard filing size. L. Sonneborn Sons, Inc., 114 5th Ave., New York.

Sewage Ejectors and Pumping Machinery.—Loose-leaf handbook for architects, specification writers and engineers. Covers subject completely with technical data, many drawings, specifications, tables, etc. 8½ x 11. Yoemann Bros. Co., 1448 Dayton St., Chicago, Ill.

Miracle Doors.—Portfolio containing 2 full page plates showing doors in combination with a variety of wall treatments, details of construction, specification directions, tables of sizes, etc. 60 pp. 8½ x 11. Paine Lumber Co. Ltd., Oshkosh, Wis.

Stage Lighting Handbooks.—Catalog K. Complete reference of all equipment required in the lighting of theatres and other auditoriums, window displays, etc. 130 pp. 6 x 9. Universal Electric Stage Lighting Co., 321 West 50th St., New York.

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SUBSTITUTION

THE substitution of items acceptable to the architect and approved by him in cases where the specifications contain an "or equal" clause is quite a different thing from the substitution that exists in many cases, some of which have recently come to our attention. In the cases we have in mind the architect's specifications called for a given material to be furnished by a certain manufacturer without the mention of any alternatives or any "or equal" clause. When the work was finished it was discovered that a similar material to that specified had been substituted and had been passed by the architect or his representative. In such cases as these the manufacturer of the specified material is usually powerless to secure redress. The owner pays for the specified article, which he does not receive, and the contractor in most, if not all cases, reaps a benefit from the use of an article which he obtains at a lower price. Both the owner and the manufacturer suffer and the contractor makes whatever difference there may be in price, because the architect's specifications do not mean what they say unless they are made effective, unless the representative of the architect on the job sees that they are carried out.

Now it is perfectly clear that if the closest kind of supervision is exercised such substitution can not occur. But to put the blame upon the architect entirely, without considering other elements which enter into the matter would be hardly fair.

It is well to look into some of these conditions by way of seeking a remedy. One reason it is possible for the contractor to make unauthorized substitutions is that the architect or his representative cannot be on the job continuously and when the material is substituted is not of a nature to be easily detected after it is placed in the building, substitution is comparatively easy. A certain remedy would be the employment of a clerk of the works but in the case of buildings of moderate or small size this is prohibitive in cost. It is probably true that in most such cases the architect's fee is not sufficiently large to permit as close supervision as he would like to give or as his client believes the work is receiving.

Another cause of this evil is the tendency of many

owners to disregard the advice of the architect in the selection of a contractor and to let the work to someone of whom the architect knows nothing, or at least nothing favorable, because of the lowness of the estimate. When this happens it is almost impossible for the architect to watch the contractor closely enough to insure the carrying out of his specifications. When the work is done by a contractor the architect knows to be reliable, the owner may be reasonably certain of satisfactory results and of receiving the goods specified.

The most practical means of reducing this evil is naturally the marking of the goods by the manufacturer in such a way that they may be identified easily by the architect or his representative on the job. In the case of many materials this is not easy and the stamping of goods with glaring trademarks which would show in the completed work, is, of course, not to be recommended. But in most, if not all, cases some mark in the nature of an identifying design may be placed on the material in such a way as not to mar the appearance of the work, while it enables the architect or his representative to see at a glance that the articles specified have been supplied, even though they may have been installed during his absence.

This is a serious matter for when an owner or an architect expressly calls for an article it may be assumed that he has good reasons for doing so and certainly, the owner should receive what he is paying for, not something else. Some of the steps, then, which will tend to reduce this evil seem to be: the closest supervision possible under the circumstances, greater firmness on the part of the architect than is often shown in advising the client in the selection of a contractor, and the marking of items that enter into building construction or equipment with unobtrusive but characteristic identifying marks.

There are many angles to this question and we would like to have expressions of opinion and comments upon substitution from our readers. Won't you write us an informal letter about this matter as you see it?

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Sketch in Semur, France, by Wilson Eyre, 1923.

MASTER DRAFTSMEN, XIII

WILSON EYRE

WILSON EYRE, although Philadelphian by descent and by long residence in the Quaker City, was born in Florence, Italy, and spent his early years in that wonderful romantic Tuscan city. Under such good influence directing the natural instincts during the formative years, no harm could be expected to come to the spirit from future associations, however bad they might be. To one naturally endowed with instinct for the beautiful, the poetic and romantic, with an eye to the glorious and quaint in the art of the past, Florence would seem to be the ideal instructor as to the right path and her protégé be expected to hold fast to the faith early instilled into his mind by all that his eyes perceived about him, during the years when the first habits of mind were formed.

Wilson Eyre and his friends, Walter Cope, John Stewardson, and a few others, founded the most interesting architectural society in existence—the T-Square Club of Philadelphia—at a time when that which passed as "architecture", in that city, was at the lowest ebb that the tide of building design has ever reached. All about them were new, huge and hideous monstrosities, evidences of dull or callous mindedness—the very devil to the mind nurtured in Italy's most alluring city. Who that can remember the early work of the members of the T-Square Club, in its monthly sketch competitions, does not realize that out of those young, earnest, artistic efforts has developed the excellent school of Philadelphia residential architecture of today,—an architecture distinctive of its locality, permeated with charm and the lovable qualities expressive of good home life? One cannot say too much of it! It is hardly

necessary to mention that the influence of Mr. Eyre's work has been the mainspring of the Philadelphia movement.

Every architect worthy of the title is primarily a draftsman and his interest in architecture usually begins by taking note

of artist presentation of architectural designs. Mr. Eyre's drawing has always been of an individual and unique style. Nobody else draws like him, and none that has imitated his work has done so with sufficient success to cause him to continue. More than a few have attempted to follow his style but have, through doing so, found a style of their own and soon branched off into it. That seems to me to be the best influence possible — one that suggests and points a way to new individuality of a fine kind, rather than one that dominates and makes mere followers and copyists.

If something must dominate a student it should be scholarship — the broad copyism of the best that has been done during all time — rather than a personal influence which tends to make a mere stereotype of itself. The best influences in all matters of art

are those which educate by drawing out of the embryo artist—or even the simple observer—all of the best qualities in his nature rather than by trying to cram into his mind the ideas or thoughts of another. The spirit of emulation is generated by the suggestion that some given thing is an easy path—for it is only human to seek that which seems to be the line of least resistance. How very easy it would be to make a simple drawing such as Eyre's! Every young student is sure he can—and many try, begin, and discover something! It is easy to make

(Continued on Page 54)



Wilson Eyre

Sketch by Wilson Eyre, 1923. Street Café, Paris, France.



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Sketch by Wilson Eyre, 1923. Caudebec, France.



Fanciful Composition Sketch by Wilson Eyre.

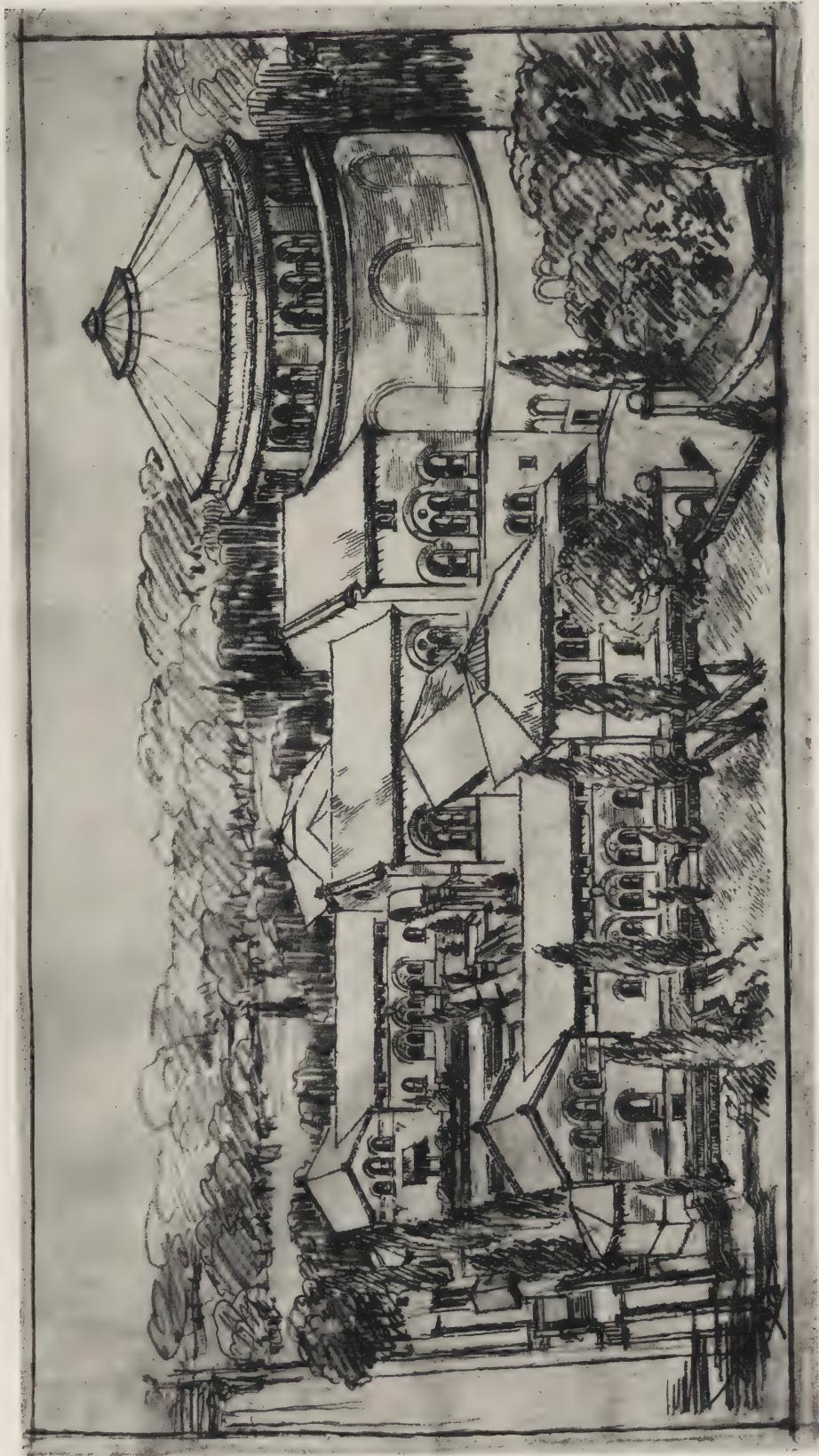
PENCIL POINTS



Drawing by Wilson Eyre. Interior of Living Room, Sparrows Point, Maryland.

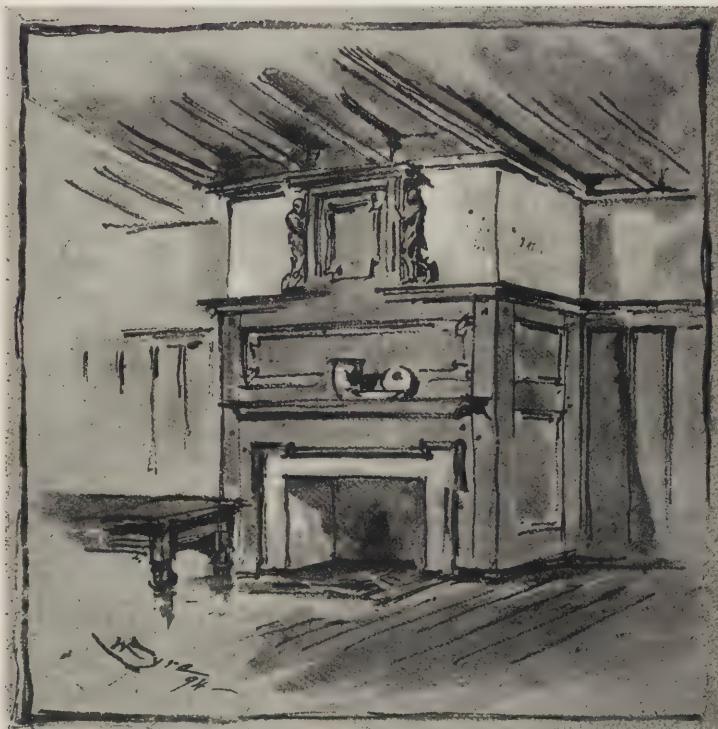


Drawing by Wilson Eyre. Proposed House in Ohio.

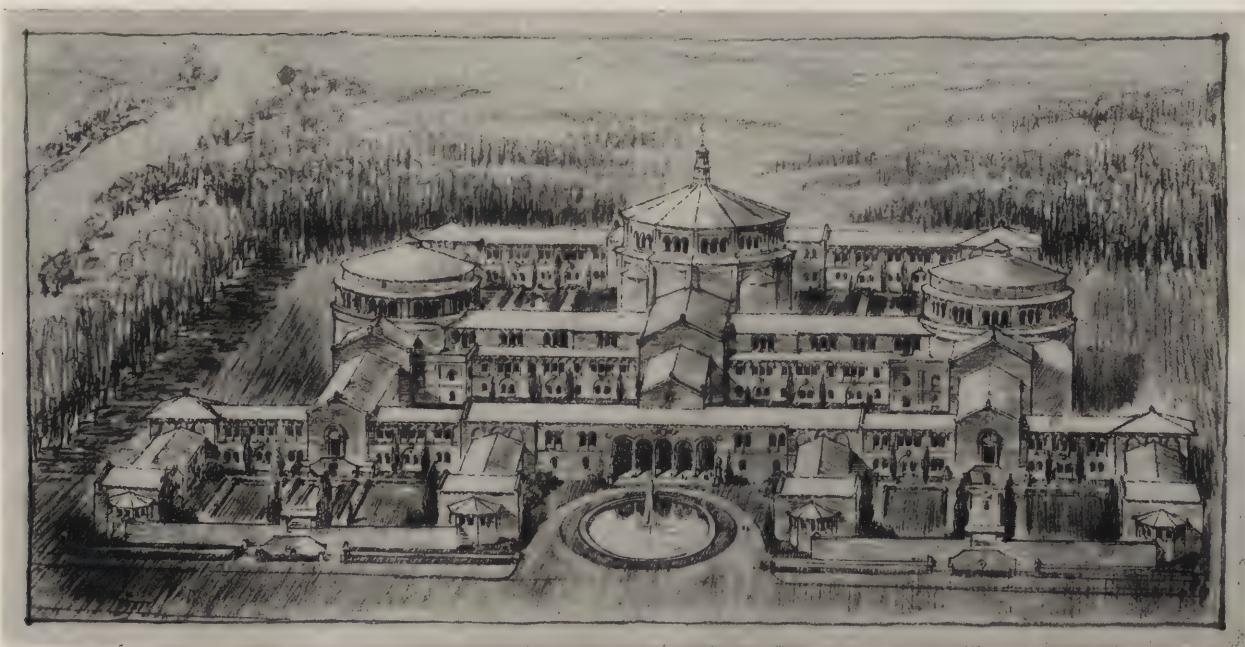


Drawing by Wilson Eyre. University Museum, Philadelphia, Pa. Wilson Eyre & McIlhainc, Stewardson & Page, Day & Klauder,
Associated Architects.

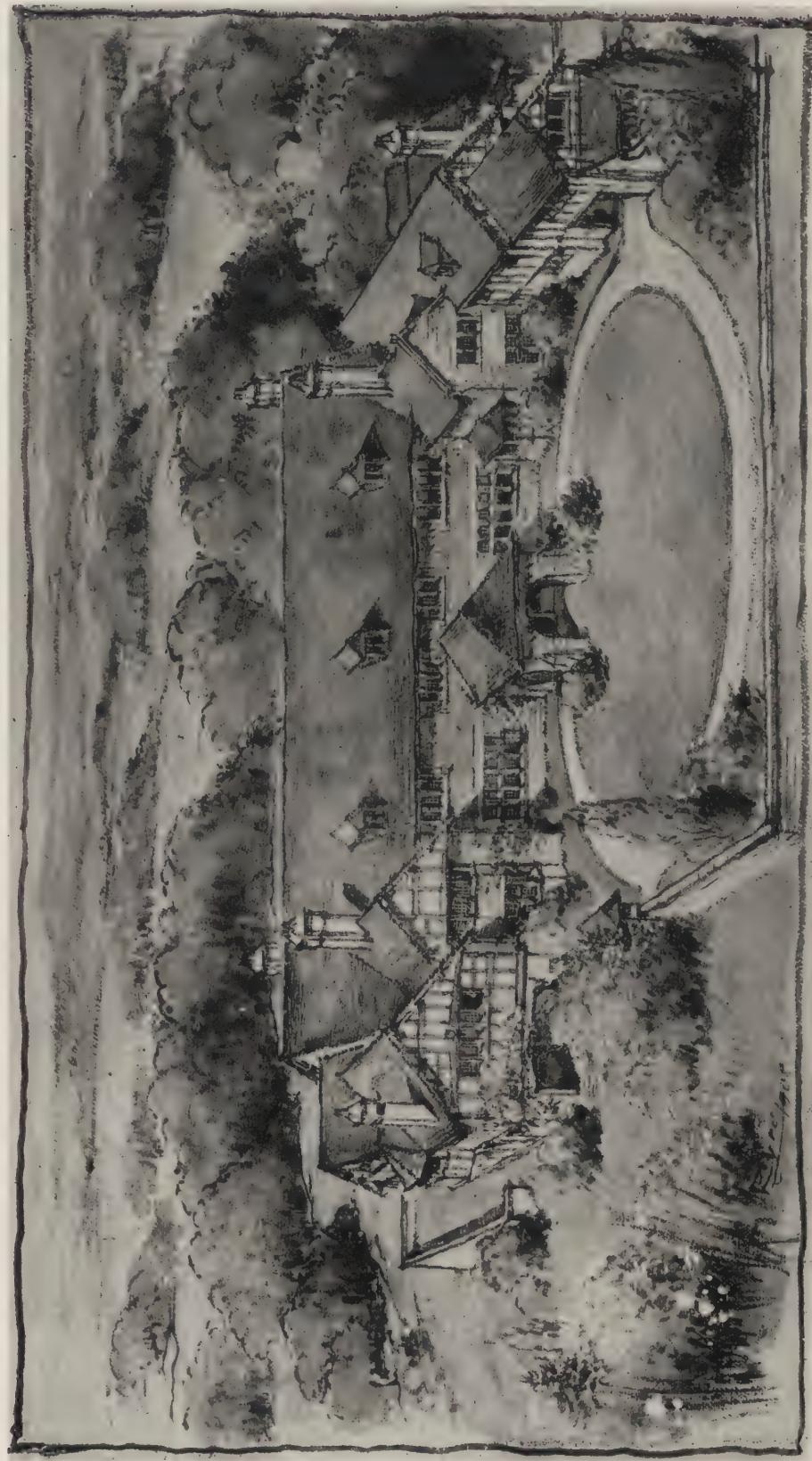
PENCIL POINTS



*Sketch of Dining Room Mantel for Dr. Harte,
Philadelphia, Pa., by Wilson Eyre.*



*Drawing by Wilson Eyre. University Museum, Philadelphia, Pa., Wilson Eyre & McIlvaine,
Stewardson & Page, Day & Klauder, Associated Architects.*



Proposed House near Chestnut Hill, Philadelphia, Pa., by Wilson Eyre.

PENCIL POINTS

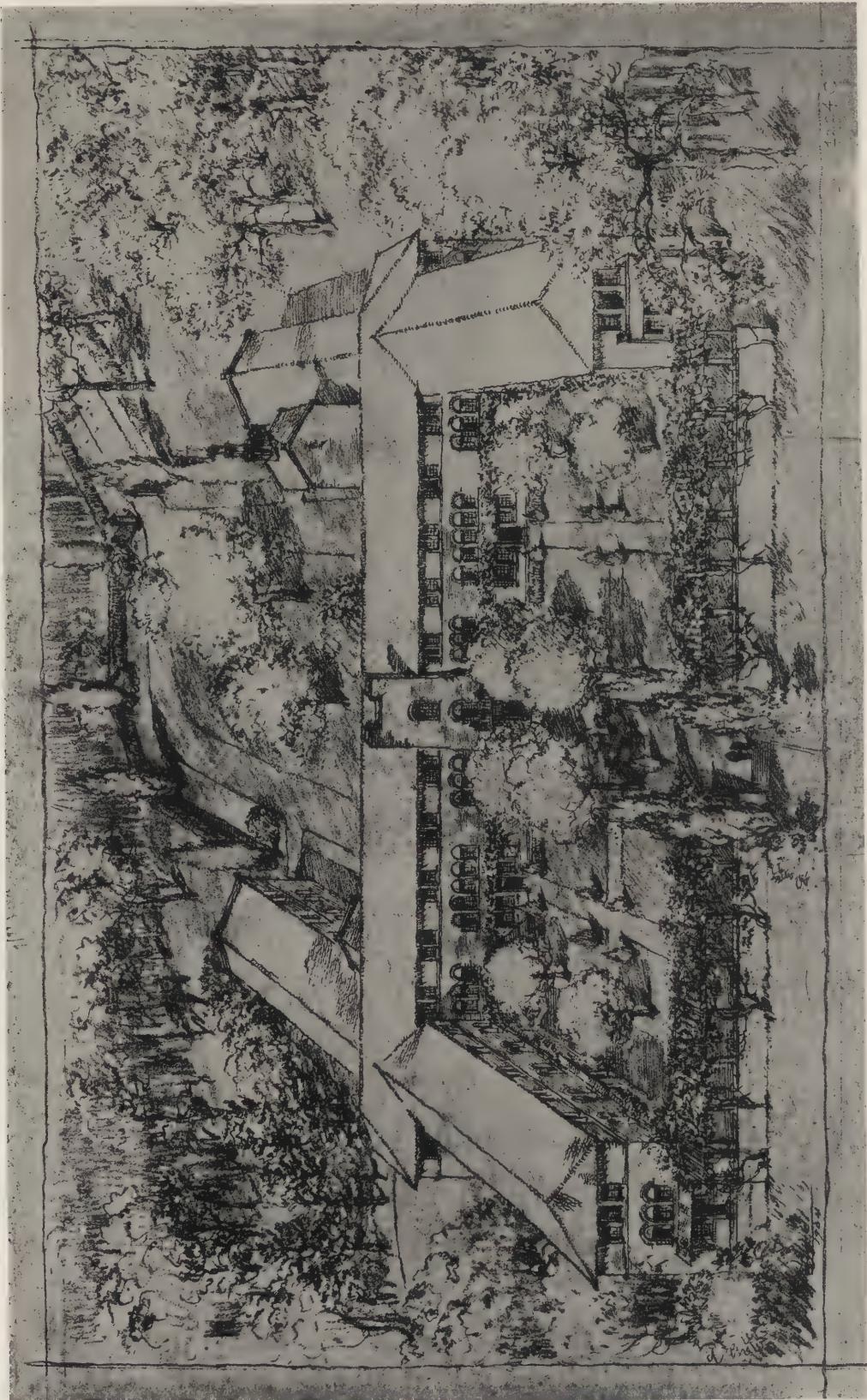


*Carvings in Oak for Mantel Corbels.
Designed by Wilson Eyre.*



Drawing by Wilson Eyre. Farren Memorial Hospital, Wilson Eyre, Architect.

*Drawing by Wilson Eyre. School and Dormitory Building for the Augustinian Fathers, Staten Island, New York.
Wilson Eyre & McIlvaine, Architects.*



PENCIL POINTS

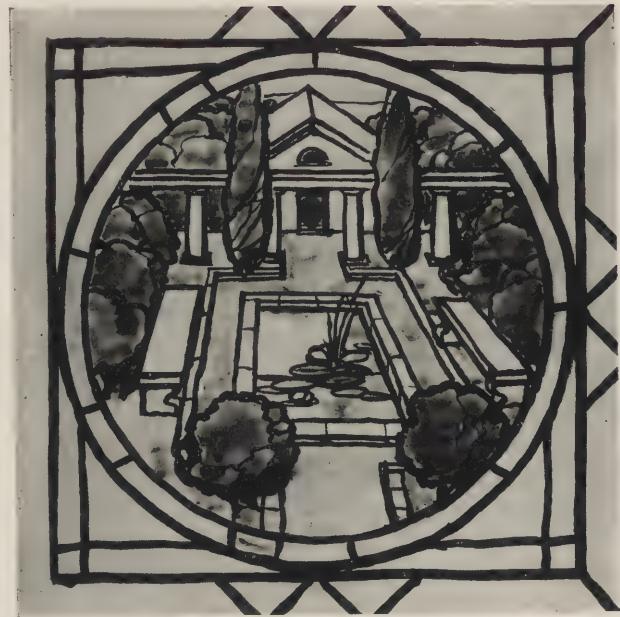


Proposed Garage by Wilson Eyre.



Drawing by Wilson Eyre. School and Dormitory Building for the Augustinian Fathers, Staten Island, New York. Wilson Eyre & McIlvaine, Architects.

PENCIL POINTS



Designs for Leaded Glass Windows by Wilson Eyre.

(Continued from Page 43)

a copy of one of those simple drawings—but it must be a copy, or nothing! Why? Immediately the student discovers that the charm of the drawing depends on the charm of the design, and for further "models" there are only the other works of the same designer. All are different. Every composition is an instinctive expression. It does not admit of improvement—at least, certainly, the kind of improvement that a follower could attempt. The kind of student who is attracted to, and studies the work of Wilson Eyre, is possessed of a certain instinct himself, which is more prone to follow the suggestions of the work of another than to copy it. That which he finds in the work of such an artist is an individual expression of his own conception of beauty, and an inspiration to self-expression. It is, therefore, not easy to point out this, that and the other pupil of Wilson Eyre; but neither is it difficult

to observe his influence in the work of nearly every younger architect practicing in the neighborhood of Philadelphia—and in many other places.

His work is, of course, widely known—for the press of Europe does not ignore our publications—and many are his admirers among the French and British architects. He was described in his younger days by Mr. Githens as "a polished Bohemian"—capable of singing a good song, or telling a good story worth remembering. Then I have been told a little story that is "on" him. Several years ago he altered an old house and at the time was rather proud of the results. Recently the client called upon him to make further alterations and he had forgotten the job. When he visited the building his first question was, "For goodness' sake, why did you build that roof so high?" "You ought to know," replied the client, "you did it!"

FRANCIS S. SWALES.

PENCIL POINTS

VOL. VI, No. 7

PLATE XXV



ETCHING BY EMIL FUCHS.

"THE READER."

The delightful little etching reproduced on the other side of this sheet, at the exact size of the original, shows the ease and freedom of drawing that reveal the artist's mastery. It is remarkable for the subtlety of its line and tones. Etching is not usually regarded as a satisfactory medium for the rendering of figure subjects because of the uncertainty as to quality and character of the lines produced, but Emil Fuchs has conducted experiments which have led him to certain methods that enable him to watch the progress of the etching and control the process with unusual precision.

PENCIL POINTS

VOL. VI. No. 7

PLATE XXVI



SKETCH BY FRANCIS S. SWALES.
GUILD HALL, GUILDFORD, ENGLAND.

The sketch by Francis S. Swales, reproduced on the other side of this sheet, represents an excellent type of sketch for the architect or student to make while travelling. It is a true sketch, embodying the spirit as well as the facts regarding the subject, made without undue expenditure of time and with skill and knowledge, as well as perception.

PENCIL POINTS

VOL. VI. No. 7

PLATE XXVII



R. HINTON PERRY, SCULPTOR.
DAUGHTER OF PAN.

On the other side of this sheet we reproduce a delightful garden sculpture by R. Hinton Perry. Mr. Perry is perhaps best known for his "Fountain of Neptune," Library of Congress, Washington, and for "Pennsylvania," on the dome of the capitol at Harrisburg, Pa.

PENCIL POINTS

VOL. VI. No. 7

PLATE XXVIII



SANTA MARIA MAYOR
RONDA, SPAIN
MARCH 20 '25
H. J. P.

SKETCH BY HERBERT J. POWELL.
SANTA MARIA MAYOR, RONDA, SPAIN.

On the other side of this sheet is reproduced one of the many interesting sketches made by Herbert J. Powell during his travels in England, France and Spain as winner of the Shelden Travelling Fellowship. Mr. Powell has just returned to this country. A brief account of his architectural training is printed on another page of this issue.

DRAFTING ROOM PRACTICE

BY HAROLD D. WAY

IT IS our purpose to consider here the plain, every-day draftsman's problem, that of turning out drawings for the builder. We are interested just now in this one part of the architect's workshop, in so far as we can isolate this part from the others.

Approached from the draftsman's view point or the boss's vantage point, "disadvantage," the bosses might say—the problem is the same, to turn out work expeditiously at a minimum cost, commensurate with good results. There has been much discussion recently, pro and con, in regard to efficiency in an architect's office. We can avoid argument, however, for having saved a minute we are not like the stranger in our midst who, having been hustled from the local to the subway express, didn't know what to do with the minute he had saved—we can apply it to better design. Brunelleschi had difficult problems, but they were much less intricate than ours. We may do what we please with our time, energy and money saved, use it for the butcher and baker, or do better design; the problem is to save it.

The work of the various offices all over the country shows clearly the desire for better drawings and labor saving devices, for the elimination of various forms of waste. Mallock, the English economist, in his "Aristocracy and Evolution" says, as we remember, that advancement is made by those rare, erratic, individuals who push ahead in advance of common folks, break loose from the conventional way of doing things and try out the new. When proven good, the common herd just adopts the new as its own. The same thing is happening in architectural work. The making of working drawings on tracing paper, not for a moment tolerated a few years ago, is a simple case in point. Photographic processes for enlargement from small to larger scale with a very considerable saving and at the same time preserving faithfully the character and scale of the smaller drawings is worthy of consideration by every architect.

A word of warning should be given, however, lest the ambitious man and the one set in his ways.

should be encouraged not to adapt himself to his environment. Some draftsmen are stubborn as well as some bosses. There is the fellow who simply will not make any attempt to find out the traditions and methods of the office he is in. An office force should be a unit, just as a base ball team, a ballet chorus, or an orchestra is. Some men will not letter, dimension or do anything else like the rest of the force. They will express elevations in feet and decimals of a foot even though every other drawing in the set has elevations given in feet and inches. Follow the system no matter what it is, consistently. When it comes to innovations, they should be carried out in the same way, consistently.

In every office it is a problem to maintain unified action and at the same time not to kill initiative. The draftsman should be more than a cog in the wheel. He has a close-up view of things that should make his suggestions especially welcome and if they are not, he is not in the right place. A man should choose his boss as carefully as the boss picks his men.

It must not be forgotten that methods must be adapted to the office. An "Ingersoll" and a "Waltham" are both built to tell time, but the factory methods in producing them are necessarily vastly different. We have "Ingersoll" offices, of course, and "Ingersoll" jobs as well, where an elaborate system would be superfluous.

It is the intention to follow in a later number with a discussion of plans, schedules and various short cuts, which will be of interest to the younger draftsmen, and to talk of those obvious things which it is well for everyone to consider now and then.

It was the good fortune of PENCIL POINTS to be able to secure for this number some especially noteworthy drawings. As the writer has no first-hand acquaintance with the work shown or with the working of the office in which they were made, he cannot explain them as he would like to. In fact, any explanation would be unfair to the drawings and the office.

A good many times a junior draftsman has said he thinks he could do a set of working drawings, but



Sketch Study for Plymouth Fountain.
McKim, Mead & White, Architects.

PENCIL POINTS

he would not know just where to start after the sketches were turned over to him (we will forget for the time being the finishing of the job). The thing that has impressed the writer most in looking at the drawings illustrated is the clear crystallization of the idea in the first sketch and the straight-a-way and thorough development of it in the working drawings and again in the details, without the usual floundering around. It is evidence of the definite thinking that obtains in few offices and is not to be mistaken for lack of study. There is a great temptation to point out in detail all of the places where this may be observed and having written it, we have scrapped it as being less interesting than letting the reader have the fun of following it through for himself from one stage to the next.

We would like, however, to call attention to such items as the arrangement on the sheet, the stage of completion to which repeated motives are carried, method of showing elevations and grades, stone jointing, the extent to which the jointing of stone work is indicated, the method of dimensioning, the various notes, such as the submission of models, reference to other drawings, work not included in this contract, the allowance of stone for carving, etc.

Were a draftsman to list up items for himself from the drawings illustrated and other drawings, not only for reference and for use as a check list but for clarification of the subject in his own mind, it would be well worth the effort. It would probably result in less foolishness and more of the essentials being put on a drawing.

In general, it is obvious that the extent to which repeated and symmetrical ways and motives need be drawn out in detail depends upon the character of the job. It certainly would be wasted effort to draw every window in an elevation for a loft building. Even some restraint was felt in the character of work illustrated when it came to the windows in the terrace wall. The words "ditto" and "repeat" must be used with great care to make sure that it is clear just what is repeated and where. A note as to symmetry about an axis is a great labor-saving device when applicable.

The extent to which stone jointing is to be shown can be determined by a choice between showing the complete jointings at small scale, indicating it at the one-eighth or one-quarter inch scale for the purposes of estimate, leaving the detailing of it to be done in



Sketch Study for Plymouth Fountain, McKim, Mead & White, Architects.

the office or indicate it and let the stone contractor do the laborious work. The difficulty with the last method is that it requires considerably more work in checking.

When it comes to the matter of careful detailing of ornament, we will always find architects who do not like to make the decision until they have to, those who can make it much better in the model and those who object to paying for the drawing of something that has to be modeled.

In draftsmanship the personal equation is bound to enter. A man is tempted to make a snappy drawing, if he knows how, rather than one easily read and definite. This applies to the line used, arrows, lettering, and the like. An arrow is useless unless it is definite and clearly indicates the point to which the dimension is taken. Lettering should be sufficiently large and of a character to be easily legible, and this is especially true of figures.

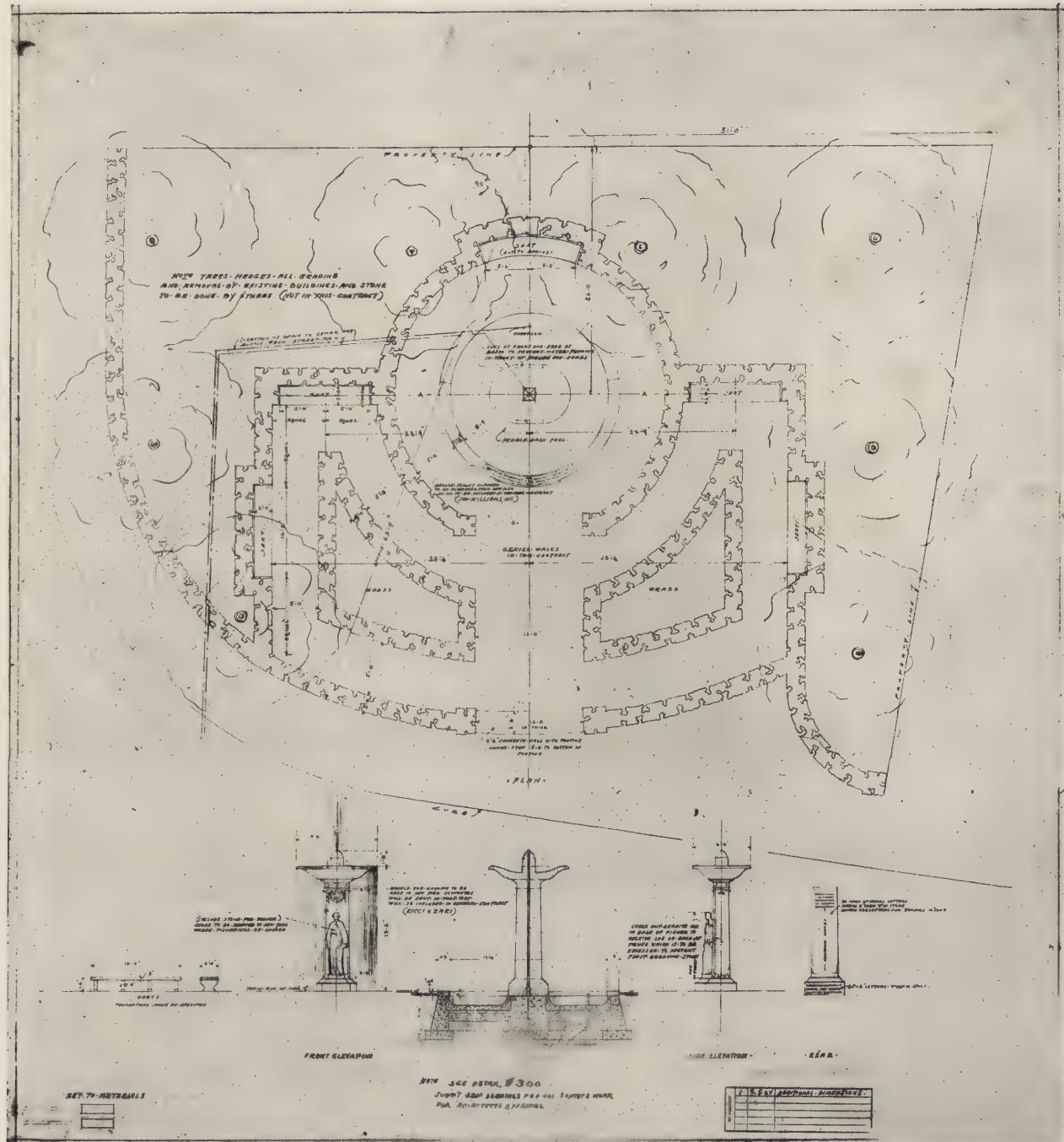
Accuracy of drawing, within reason, is conducive to a considerable saving of temper and time. A method, simple enough, but apparently not often used, is to draw elevations by scaling from *datum* or some *datum* assumed for the particular drawing. This eliminates that troublesome accumulative error which is not only an annoyance but a great waster of time. It is certainly a help to have the over-all dimension scale within reason and to have the proper relation of parts maintained.

Too many dimensions are as bad as too few. Window heights must be fixed, for instance, on the exterior of the building, but the dimensioning of the same windows on the interior, unless required by the coursing of interior masonry, is dangerous business. The window detail may be settled once for all, but even then there is chance for error and unless required this procedure should be avoided.

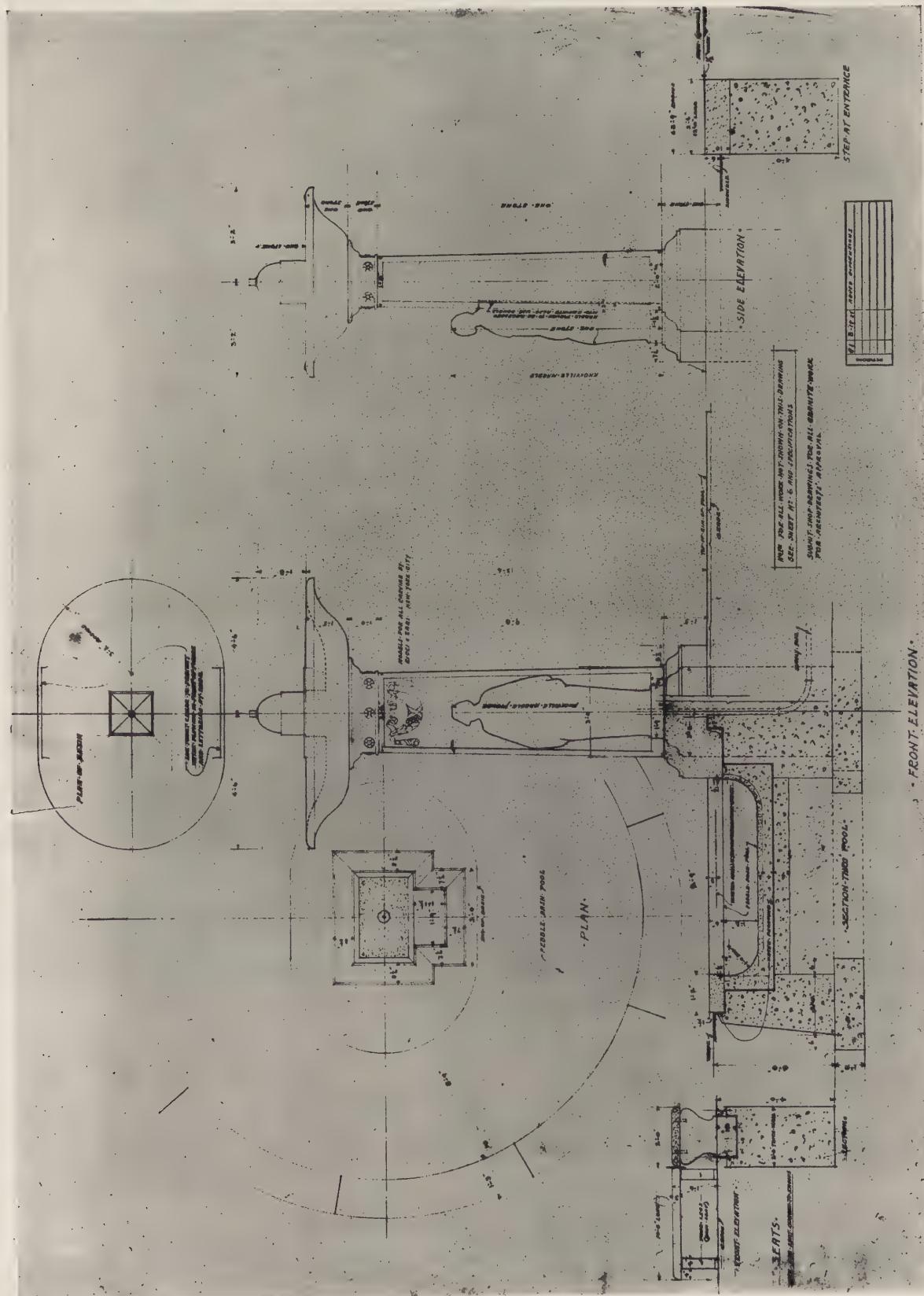
Careless work or the failure to consult all of the other drawings related to the work in hand results in some curious and, at the same time, exasperating disagreements. An example of this would be the case of fixing the pitch of a roof on one drawing as thirty degrees, on another by a note that the roof had a rise of seven inches in twelve and on another it might have a dimension of fourteen feet to the ridge with a span of forty-eight feet, four inches. The results are almost the same but not exactly—the question is, which is right, and will all the trades pick on the same pitch without correspondence.

The mere putting on of notes without thought, without reference to the specifications, other drawings, thought as to what the contractor wants to

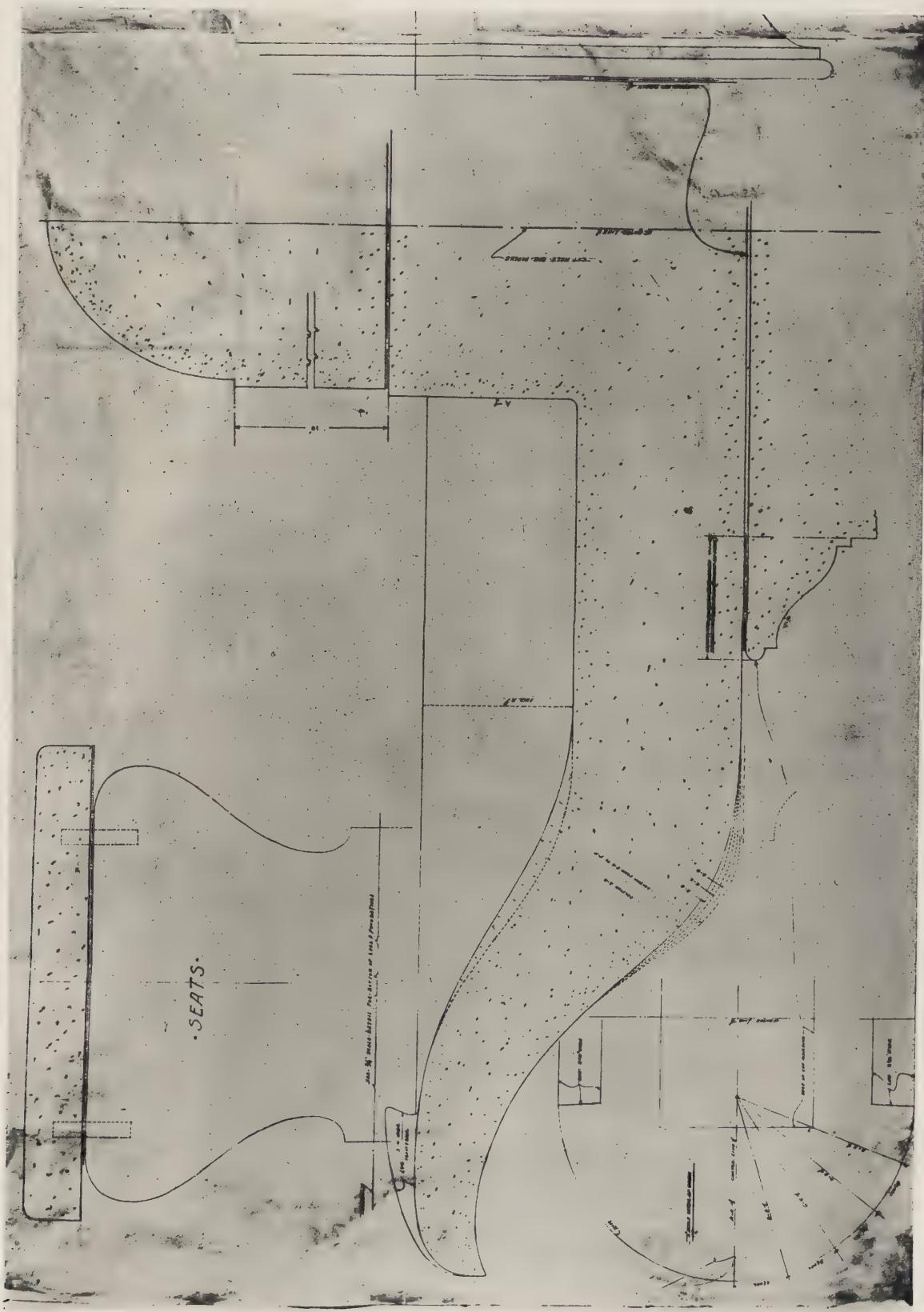
PENCIL POINTS



Plans and Elevations (Quarter-inch scale contract drawing). Memorial Fountain, Plymouth, Mass.
McKim, Mead & White, Architects.

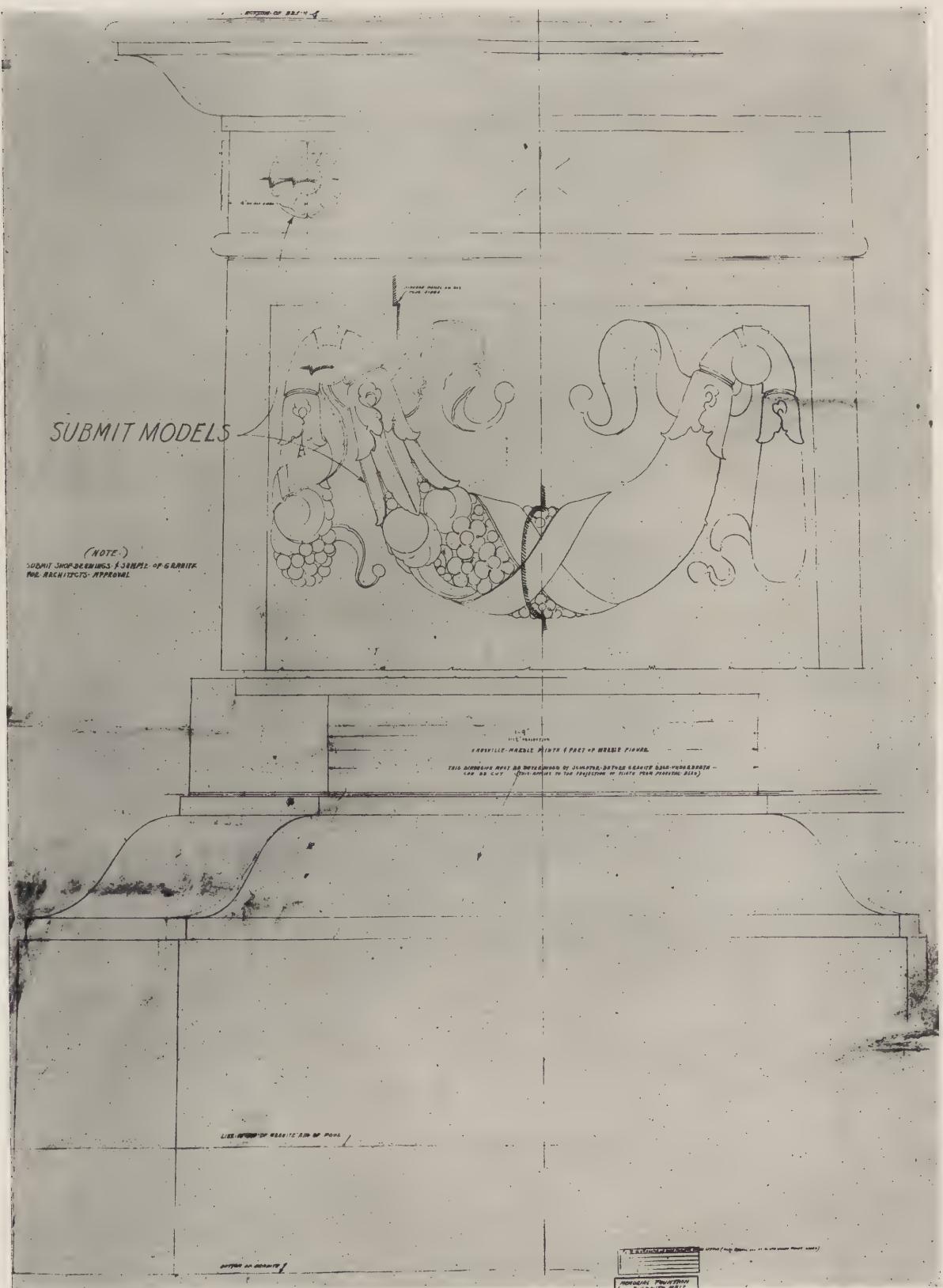


Three-quarter Inch Scale Details (Contract drawings). Memorial Fountain, Plymouth, Mass. McKim, Mead & White, Architects.



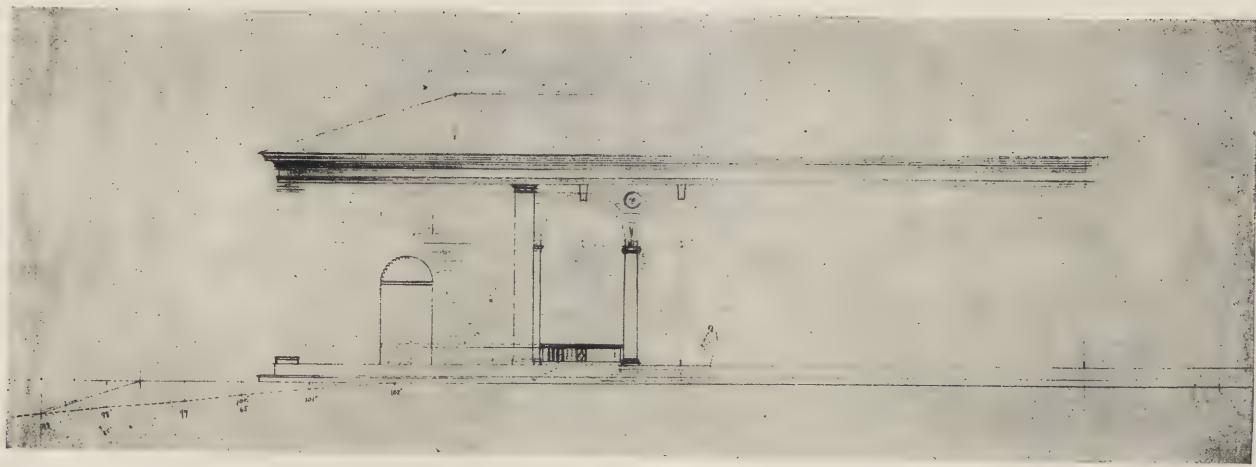
Full Size Detail—Memorial Fountain, Plymouth, Mass. McKim, Mead & White, Architects.
(See other half of sheet on page 68)

PENCIL POINTS



Full Size Detail—Memorial Fountain, Plymouth, Mass. McKim, Mead & White, Architects.

PENCIL POINTS



Elevation, Butler Art Gallery, McKim, Mead & White, Architects.

know and needs to know is a great past-time, but is not as much fun for the man in charge of the job, the man who checks, the contractor and the boss. Very often a note seems perfectly clear to the man who formulates it but is utterly meaningless to the man who has it thrust at him. If it is something worth adding to a drawing it deserves careful framing. A draftsman should put himself in the contractor's shoes, mentally, and see how he would interpret the words after he had twisted their meaning around a few times. It is surprising how many meanings spring from a telegraphic sentence. Then again the drawings should be carefully examined to see what additional information is required—what there is that the contractor would be in doubt about. Titles likewise require attention to avoid ambiguity and to define carefully just what is included in the drawing.

The practice of putting a partial specification on the drawing is not in conformity with the best practice, because in the first place, the note cannot usually be complete, and in the second place one naturally expects to find it in the specification. The result is like a poorly indexed book, the information is there but cleverly hidden. Of course if one wishes "to put it over" on the contractor, this is one method. The builders will tell us in confidential moments, though, that a ten per cent item added to his total bid is his best protection.

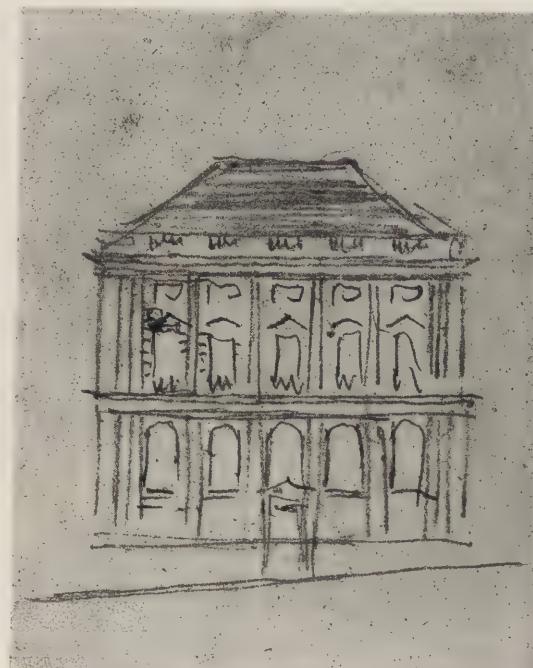
Drawings are in the nature of things best fitted to portray to what extent a given material is used—its form and its setting; the specifications should define the

quality and other physical properties of the material, particulars as to delivery and the quality of workmanship. It makes for convenience in reference to keep these two methods of definition distinct.

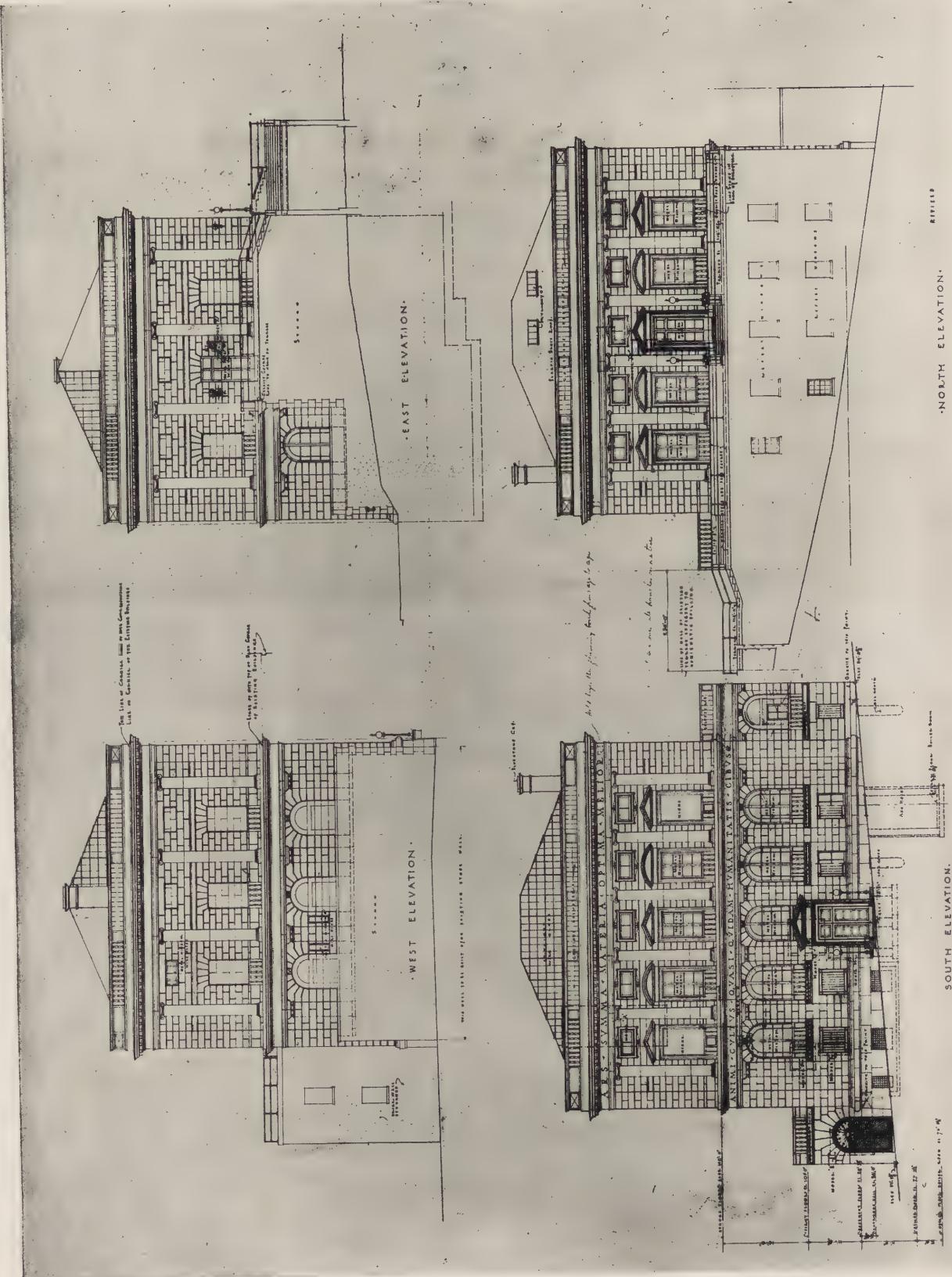
Another objection to the specification-like notes is the unnecessary crowding which they cause. There is enough really pertinent information to a drawing to make it interesting if not 'busy' if that is the effect that the draftsman desires. It is difficult and requires considerable ingenuity to so place the dimensions, captions, and the notes so they may be easily read and not interfere with the drawing itself. Dimensions should, of course, take precedence in the scheme of things as notes clearly worded and sufficiently prominent may be placed almost anywhere.

Careful arrangement of work on the sheet contributes greatly, not only to the appearance but also to the legibility of the drawing. For instance, several elevations or sections placed side by side, on the sheet, should, when possible, be referred to the same *datum*. Errors in draftsmanship are reduced to a minimum when elements occurring at the same level can be so drawn mechanically. For convenience the *datum* lines or floor levels can be carried through from one drawing to the next. This is especially of value when a whole series of small sections can be grouped together and placed at the proper relative levels. It certainly is better thus than when, in a moment of sudden inspiration or burst of enthusiasm, a draftsman decides to spatter the drawing with a new section.

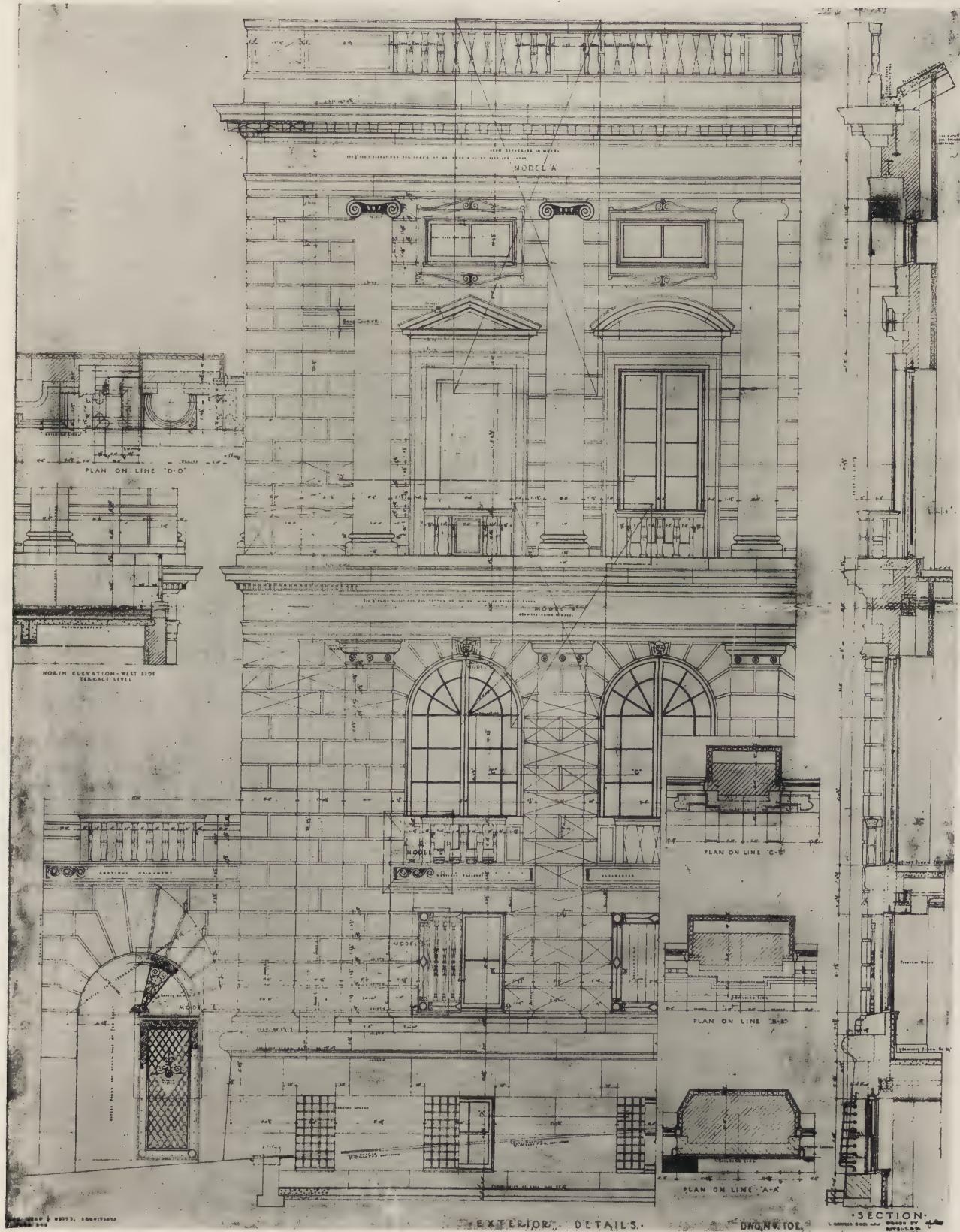
(Continued on page 87)



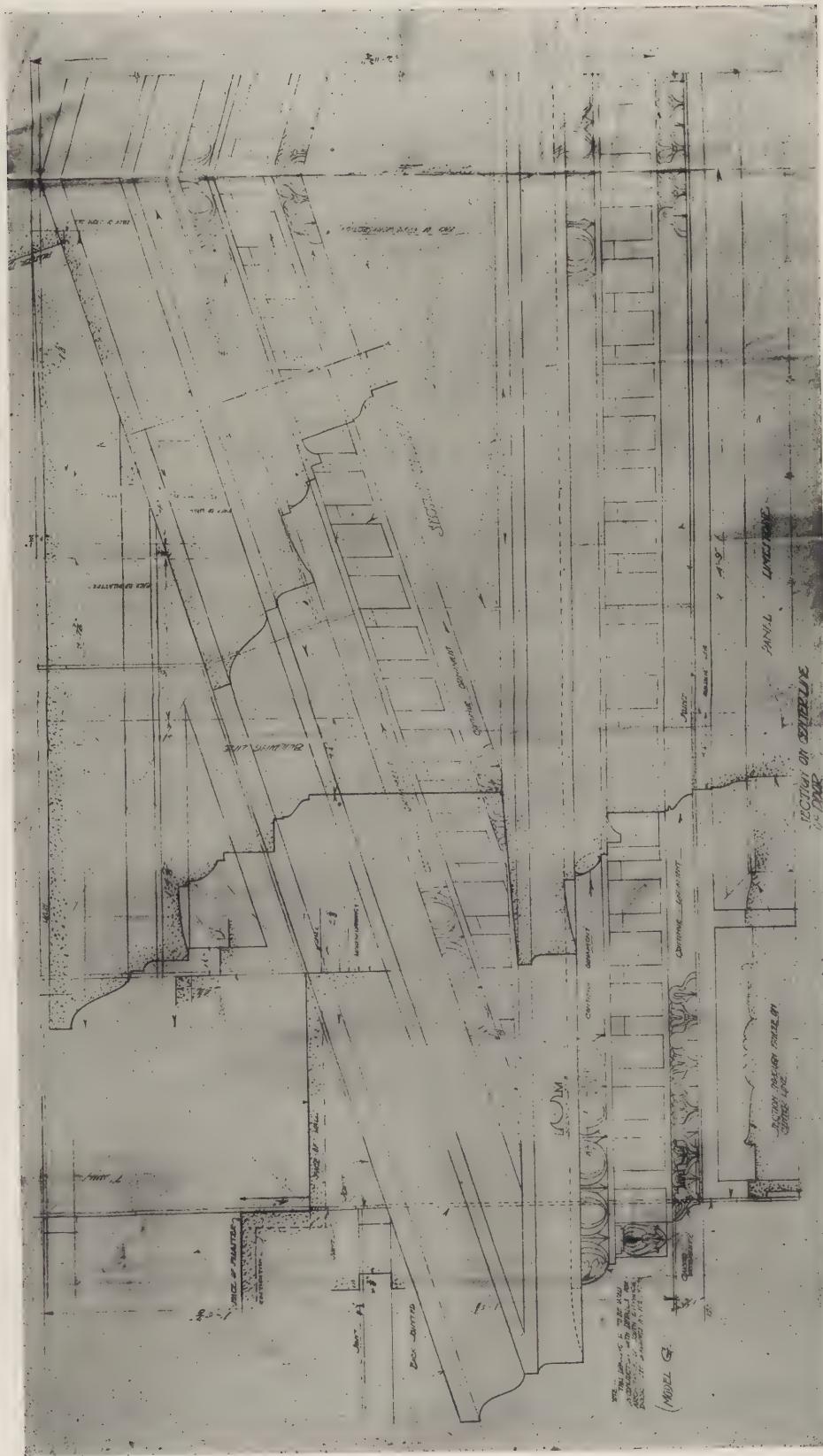
Pencil Sketch for Elevation. Washington Heights Educational Building, McKim, Mead & White, Architects.



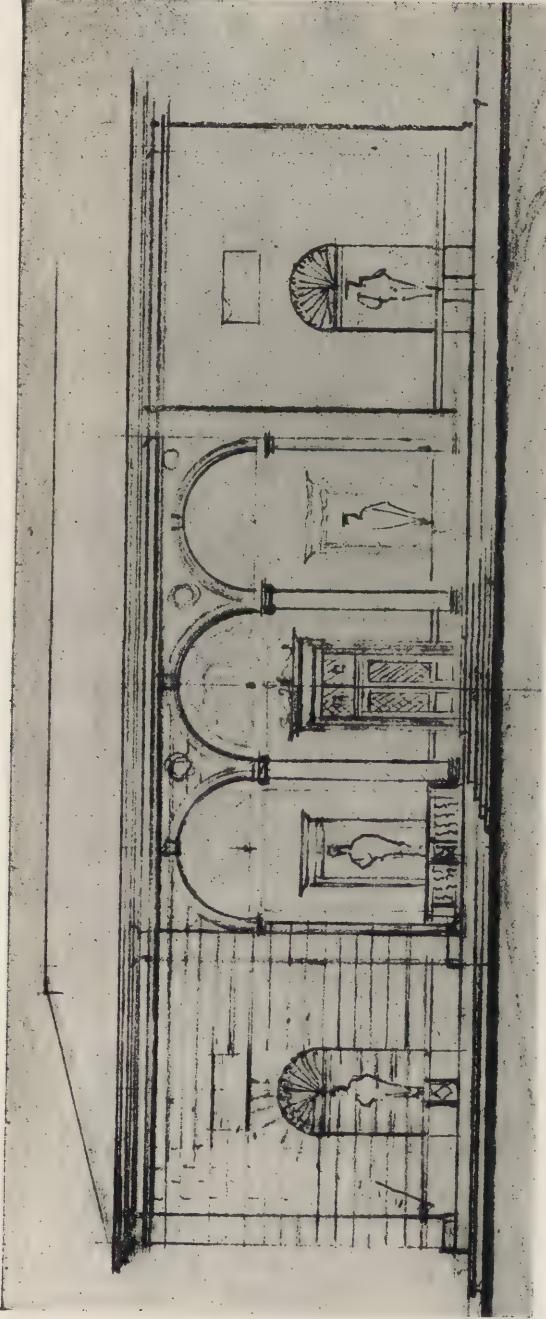
Contract Drawing One-eighth Inch Scale. Cloth. Washington Heights Educational Building. McKim, Mead & White, Architects.



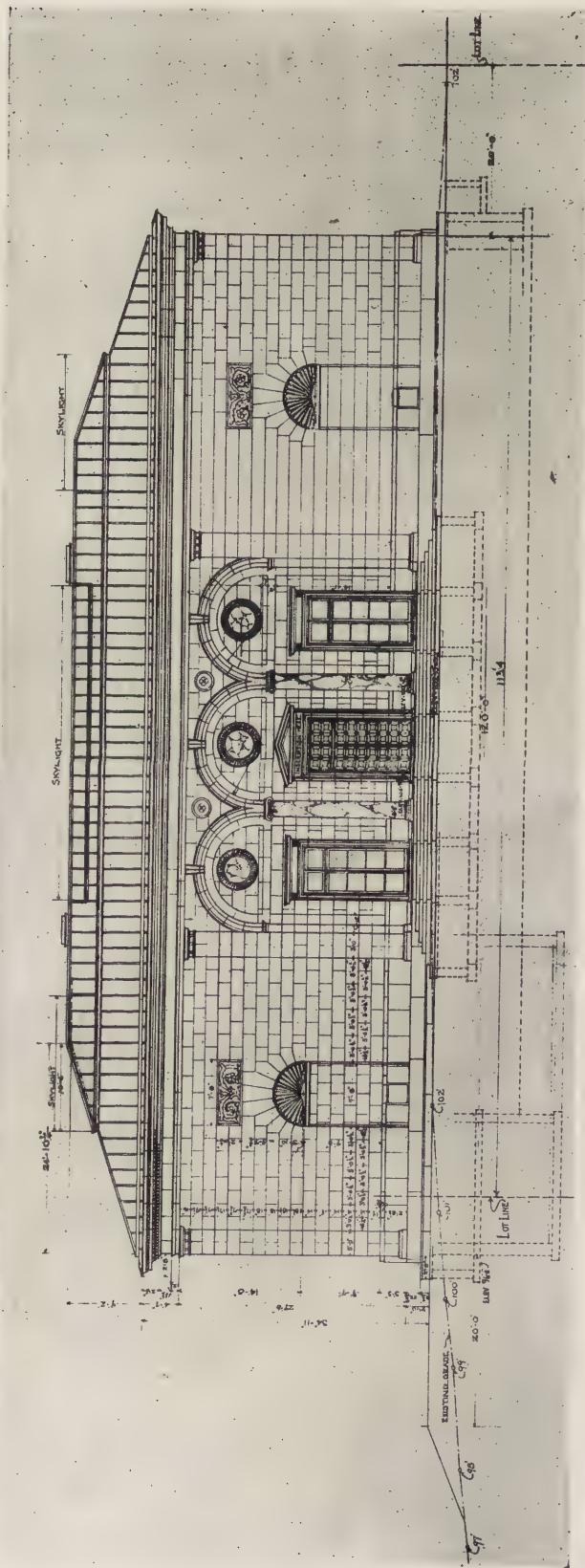
Three-quarter Inch Scale Elevation, Cloth. Washington Heights Educational Building.
McKim, Mead & White, Architects.



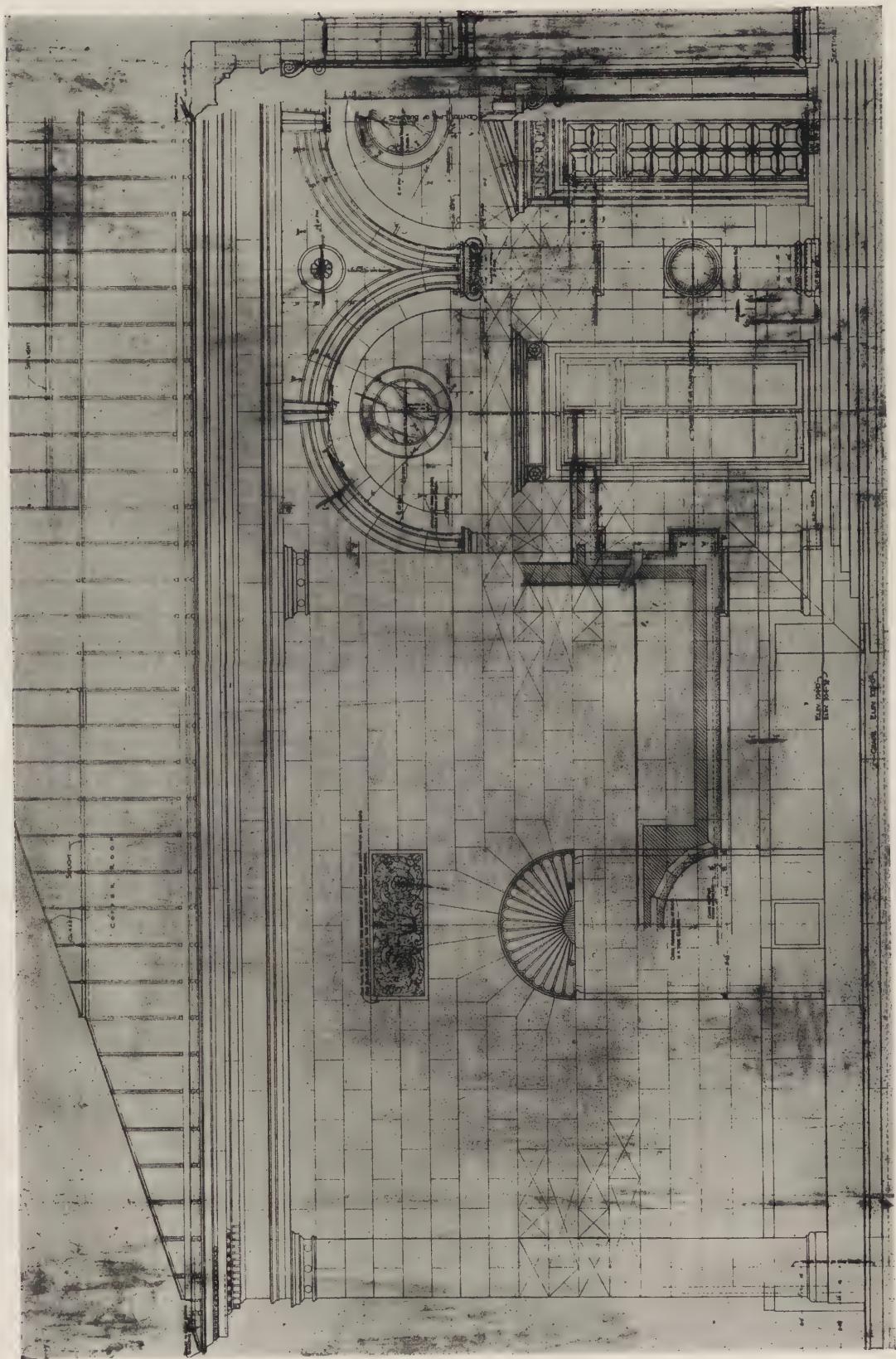
Full Size Detail—Washington Heights Educational Building. *McKim, Mead & White, Architects.*



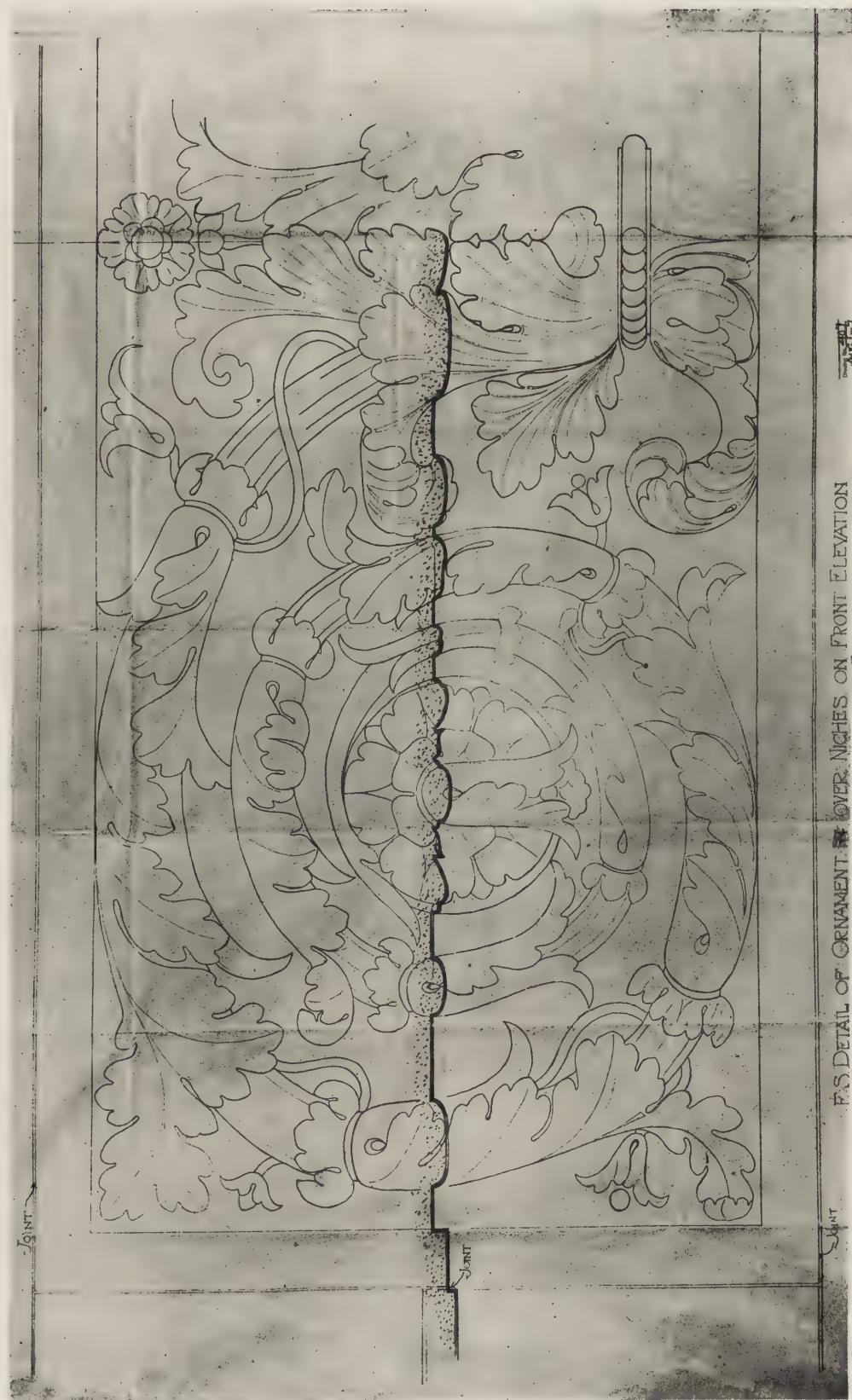
Original One-Eighth Inch Scale Elevation.



Contract Drawing, One-Eighth Inch Scale, Cloth. The Butler Art Gallery, McKim, Mead & White, Architects.



Three-quarter Inch Scale Elevation. The Butler Art Gallery, McKim, Mead & White, Architects.



F.S. DETAIL OF ORNAMENT. OVER NICHES ON FRONT ELEVATION

Full Size Detail. The Butler Art Gallery. McKim, Mead & White, Architects.

HERE and THERE and THIS and
The PITTSBURGH

DEPARTMENT



Copyright, Altwater & Bro., Pittsburgh, Pa.

The Silhouette of Pittsburgh, Pennsylvania, on one of its 365 days of suns



The Pittsburgh Architectural Club and The Pittsburgh Chapter, A. I. A., at a joint meeting, Carnegie Institute of Technology, May 19th, 1925. Photo specially made for PENCIL POINTS.

WHAT for JULY CONTRIBUTED by TECTURAL CLUB

CONDUCTED BY R. W. R.



the Pittsburgh Architectural Club Members, but not yet entirely finished.



Group. Left to right—W. H. Harrold, Treas., P.A.C.; Edward B. Lee, Editor; Max Nirdlinger, V.P., Frederic Bigger, Director A.I.A.; H. K. Jones, Pres. A.I.A.; T. W. Ludlow, Sec. A.I.A.; K. R. Crumpton, Pres. P.A.C.; Thos. Pringle, Director; Samuel Yellin, Guest.

The PITTSBURGH ARCHITECTURAL CLUB



PENCIL POINTS has opened its pages of this issue to the Pittsburgh Architectural Club. What is the Pittsburgh Architectural Club? It is an association, a gathering, a caucus, a conglomeration of men, presumably architects or draftsmen, with here and there a stained glass man or a material man to liven up the mass and add that variety which we are told is the spice of life. It is incumbent upon an American Club to be full of bustle, to have great undertakings, to pervade the atmosphere surrounding it with the continual news of its activities. The Architectural Club does this to the best of its abilities. It maintains an exhibition of architecture in which each year the people of Pittsburgh are afforded the precious opportunity of surveying the marvelous advances in architecture which have been made by the profession in the city and elsewhere. We have had good exhibitions; we have had not so good, but they have done something. It has afforded us an opportunity to chatter, to see somebody's else work, to get ribald over this, to wax enthusiastic over that, and generally freshen our minds.

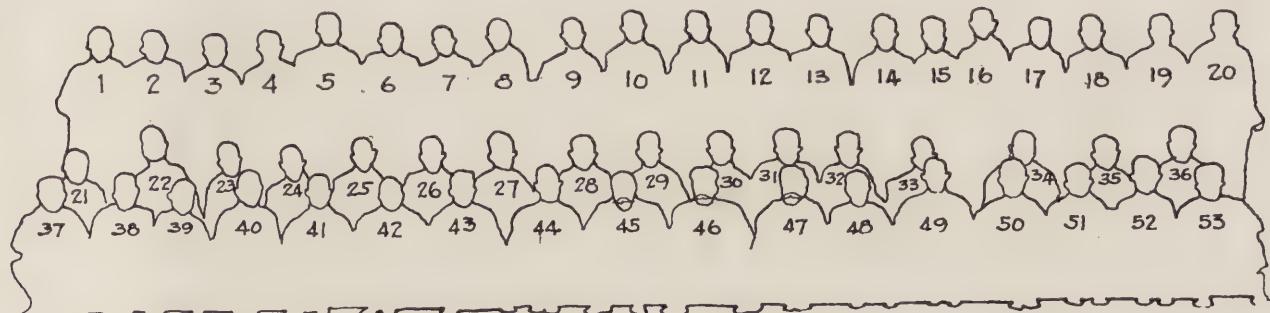
We have also endeavored to kick up a racket aimed at that vast and impenetrable mass called the outside public, and register at least a dim impression upon it of such a thing as an architectural profession. Like every other club, we have been torn at times with divided counsels, the variety of opinions held in the club being as numerous as the members. There has been much squabbling, much argument, some agreement, some violent quarrels and from time to time one party or another emerges from the yeasty stirring to voice the opinions of its crowd as to how the Architectural Club should impress public life and shed honor upon the noble profession to which we belong.

In brief, the Pittsburgh Architectural Club is like every other professional club that ever was. With a carefully managed publicity we could pose as a most four-square organization solidly planted behind continuing balances, well meditated and divinely inspired, but we do not wish to pose thus. We prefer to look the facts in the face. When we dig into the minds of people and reflect on the way our slow and imperfect civilization has developed, common honesty requires us to recognize that the purpose of a club is not primarily to present to the outside world the front of a highly developed and efficient organization—relentlessly pursuing chosen ends to a cer-

tain consummation—but rather a means whereby many minds can clash, rub against each other, stimulate each other and so reflect itself in less direct but more substantial ways upon the profession itself. At least the most fundamental justification for the future of architecture does not lie with propaganda but with that which the propaganda is supposed to benefit, namely, the architects themselves. For this and other reasons which, chased down to their sources, come back to the same thing, we have published for several years *The Charette*, and styled in its first issue, the "Official Wurlitzer" of the Pittsburgh Architectural Club, a brand of humor which every architect will recognize affectionately, and later the "Official Vehicle", and finally, "A Little Journal of Rejuvenation". In this little paper much nonsense has been published, some fun, here and there a grain of sense, but altogether it has provided a place where the members can moderately abuse each other or express their dogmatic opinions about the theory, the practice, and the prospects of this so-called profession to which we all are bound.

The Pittsburgh Architectural Club sketches; it picnics; it draws from life; it listens to lectures. None of these activities perhaps is as whole heartedly attended to as the eating of dinner. But what would you? It is said on high authority that man does not live by bread alone, but we are an improved people. Does this tell you anything about the Architectural Club? We fancy no more than could be told by any Architectural Club throughout the land. Ups and downs, successes and failures are a portion of all of us, but the Pittsburgh Architectural Club has one expressing faculty, one gorgeous characteristic, one indomitable fact in its makeup—it will persist in being, come up, come down, slow going or fast going; the Pittsburgh Architectural Club has lived for thirty years and will live for three hundred years to come, if so be it that architects may eat and live for such a space of time.

It is fun to belong to the Pittsburgh Architectural Club because it makes life interesting. There are such abundant opportunities to get hopping mad or indulge one's self in gayety, and whatever may be on the knees of the gods, this much is certain—that the Pittsburgh Architectural Club serves the profession in ways no other organization could.



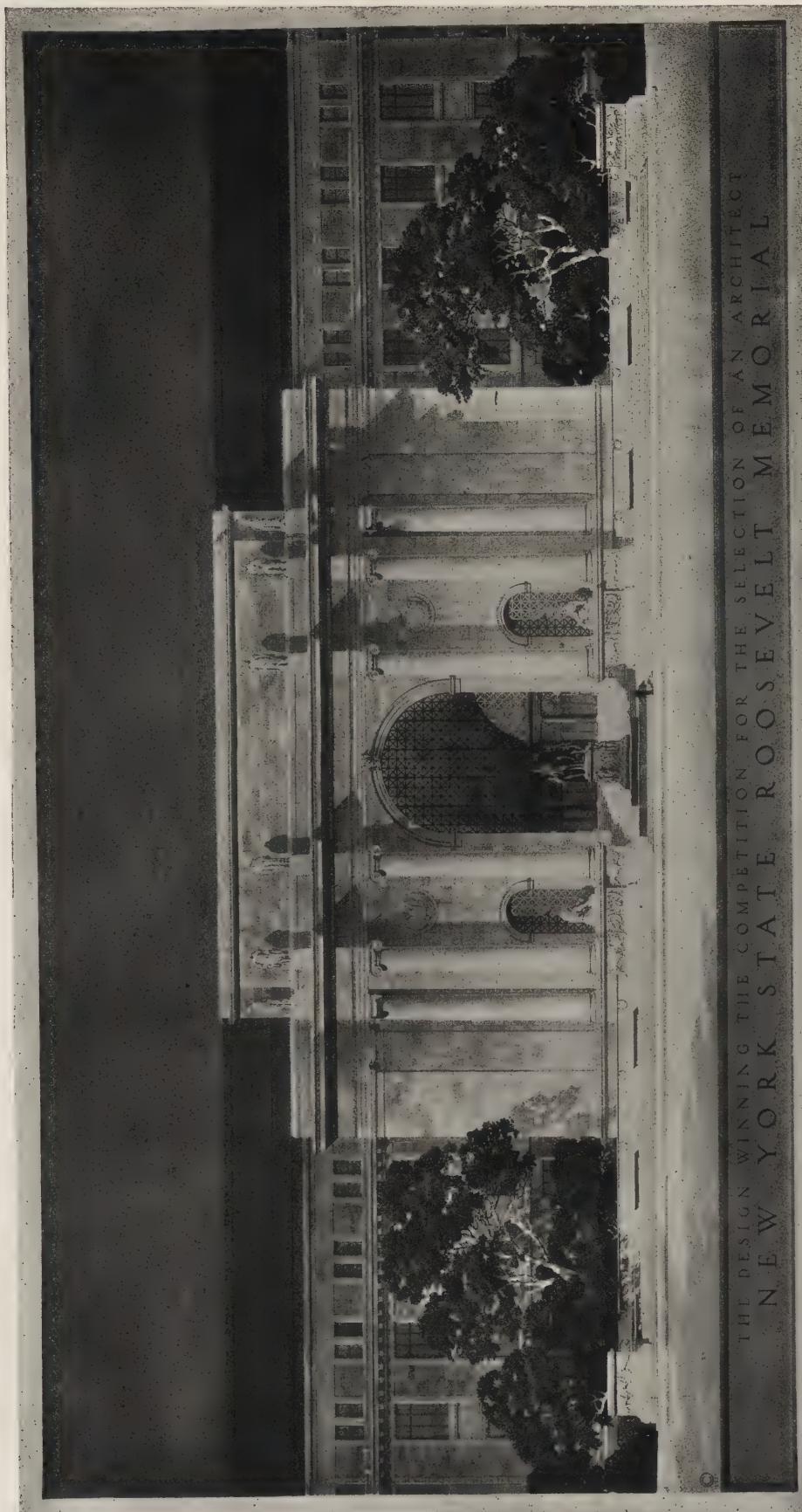
1. M. Nirdlinger, 2. Kaiser, 3. Frank Hitchens, 4. Kleber, 5. Guest, 6. J. V. Wilson, 7. Simboli, 8. Campbell, 9. Wolf, 10. Weber, 11. Chalfant, 12. McWilliams, 13. Trimble, 14. Kirchenbauer, 15. Neal, 16. Walters, 17. Roebling, 18. R. A. Willson, 19. Pringle, 20. Stulen, 21. Hoffman, 22. Dunnells, 23. Ingham, 24. S. Brown, 25. Ishen, 26. Vieman,

27. R. McQueen, 28. Bigger, 29. Ludlow, 30. Jones, 31. Marks, 32. Broida, 33. Simboli, 34. Guest, 35. Schwab, 36. Kroff, 37. Crompton, 38. Boyer, 39. Rewitti, 40. Hagan, 41. Gellins, 42. Wilkins, 43. Harrold, 44. Lee, 45. Hornbostle, 46. McLean, 47. J. M. McQueen, 48. Guest, 49. Shaw, 50. Collins, 51. Bedner, 52. Henry, 53. Steffler.

Key to Group Photograph on Page 76.

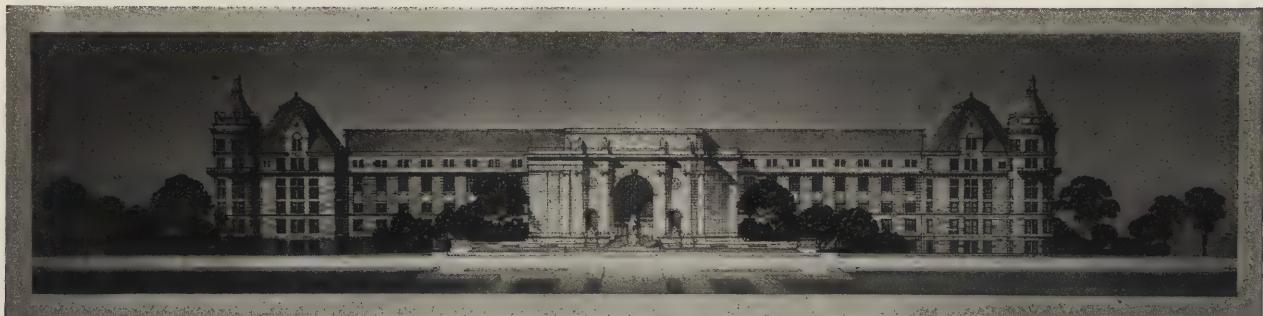


IN YE EARLY DAYES OF YE PROFESSIONE.
YE ARCHITECT DISCOVERS THAT HE HATH MADE YE BROOME CLOSET TOO SMALLE.



Copyrighted by Office of John Russell Pope.

The Design Winning the Competition for the Selection of an Architect for the New York State Roosevelt Memorial,
John Russell Pope, Architect.



Copyrighted by Office of John Russell Pope

The Design Winning the Competition for the Selection of an Architect for the New York State Roosevelt Memorial, John Russell Pope, Architect.

JOHN RUSSELL POPE APPOINTED ARCHITECT FOR NEW YORK STATE ROOSEVELT MEMORIAL.

JOHN RUSSELL POPE has been appointed architect for the New York State Roosevelt Memorial as a result of his design submitted in the "Competition for the Selection of an Architect for the New York State Roosevelt Memorial". On pages 80 through 82 we reproduce some of the drawings submitted by Mr. Pope.

In the general statement of the Program of the Competition, Professor Henry Fairfield Osborn, Chairman of the Board of Trustees of the New York State Roosevelt Memorial, stated that:

"The design should symbolize the scientific, educational, outdoor and exploration aspects of Theodore Roosevelt's life rather than the political and literary.

"The design should be consistent with the dignity of the Empire State and reflect the national and international influence of Theodore Roosevelt.

"The Memorial should be harmonious with and embody the ideals, purposes and plans of the American Museum of Natural History to which Theodore Roosevelt devoted the early and closing years of his life.

"The Memorial should provide not only

for visitors from the City and State but should be so planned that it would also become an integral part of the school and public educational system of the State; and likewise form an extension to the educational work of the American Museum of Natural History in the City and in the State."

The site of the memorial has been so chosen as to give it a close and significant relation to the American Museum of Natural History, which is located in the City of New York on a plot of ground bounded on the south by 77th Street, on the east by Central Park West, on the north by 81st Street, and on the west by Columbus Avenue. The memorial will be erected on a plot adjacent to the southeast wing of the museum.

The Jury which passed on the drawings was composed of the Trustees of the New York State Roosevelt Memorial and two architects, one selected by the Trustees and the other selected by the competitors and consisted of the following:

Henry Fairfield Osborn, Chairman of the Board of Trustees,

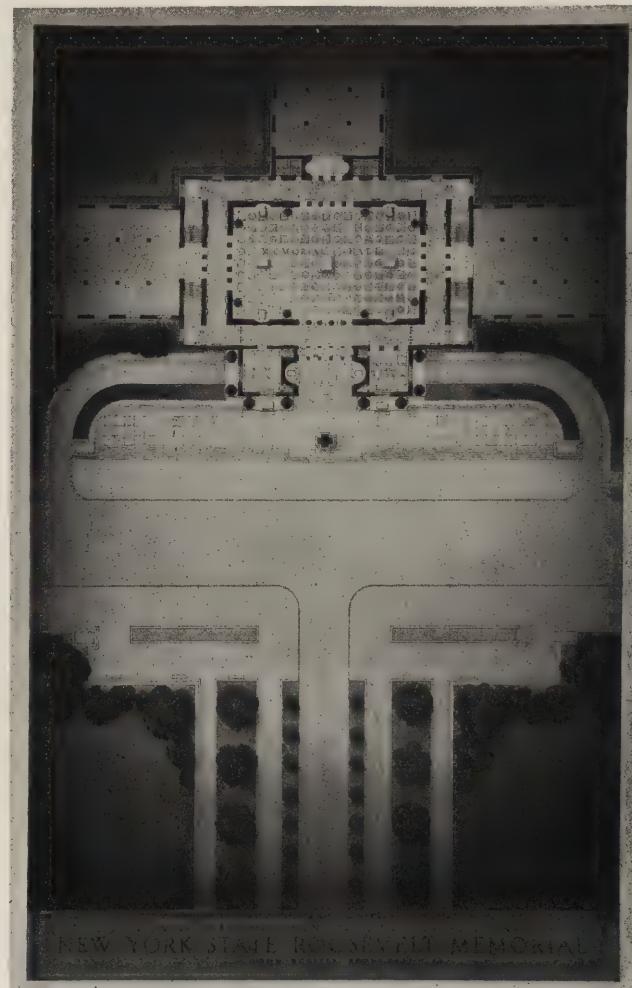
Peter D. Kiernan, of Albany,

Mrs. Douglas R. Robinson, of New York, Chauncey J. Hamlin, of Buffalo,

Charles W. Flint, Chancellor of Syracuse University,

(Continued on

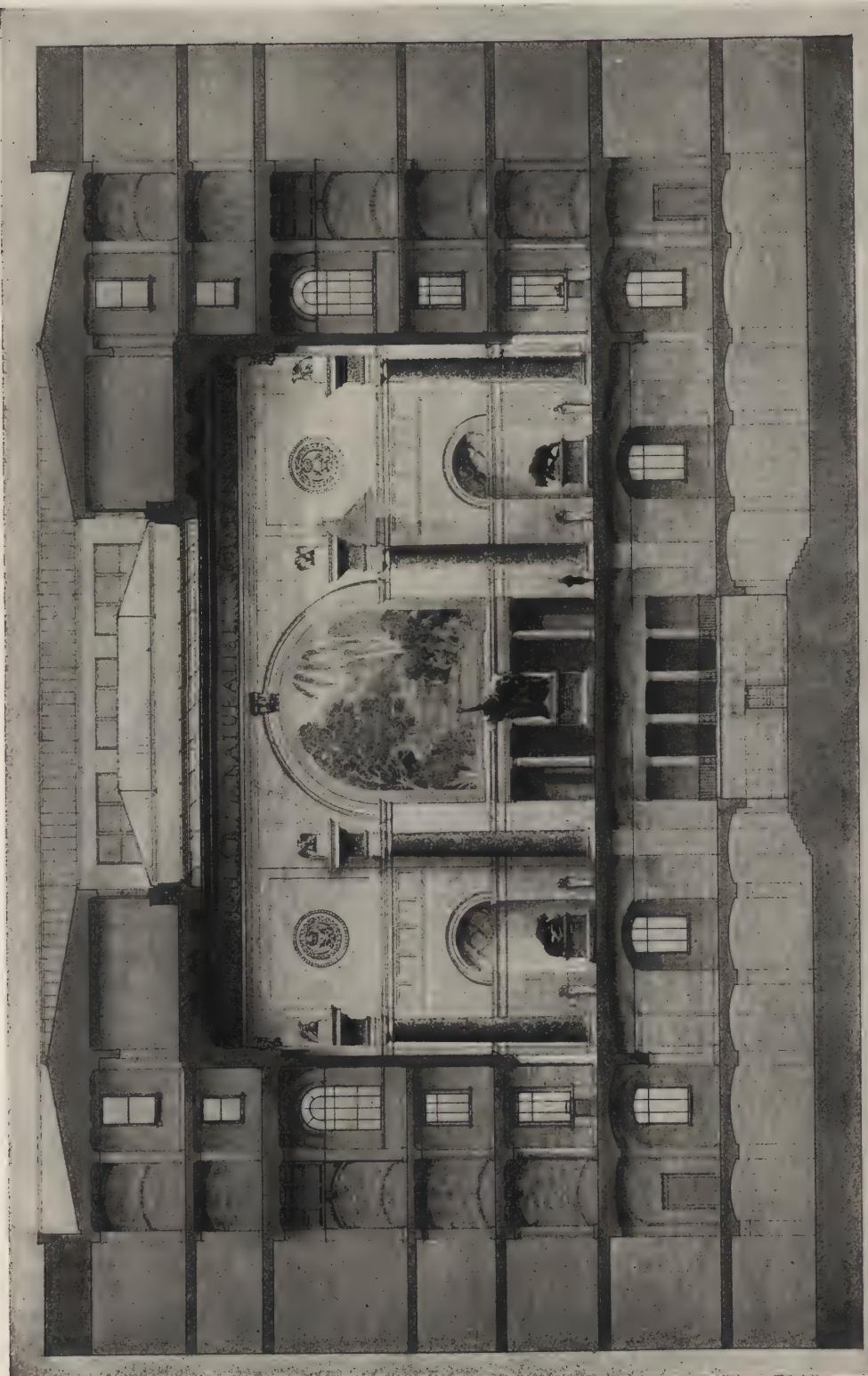
Page 89)



Copyrighted by Office of John Russell Pope

Plan.

Copyrighted by Office of John Russell Pope.
Longitudinal Section—The Design Winning the Competition for the Selection of an Architect for the New York State Roosevelt
Memorial. John Russell Pope, Architect.



PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following:

"Another Annual Exhibition of the work of the Fellows has come and gone. The King's visit, the reproduction of the musical works, and the general exhibition, attended by 450 people, took place, all on the same day. It was such a strenuous affair, that next year I believe it will be better to have the exhibition spread over three days. The exhibition was unusually good. We are keeping it in place for Mr. Edwin H. Blashfield to see—he is expected any day."

"The French Academy and the English School have also had annual exhibitions. It is interesting to compare the tendencies of the artists in these institutions with those of our Fellows. Some day perhaps there will be a combined exhibition of the work of all these talented young men.

"Prof. Kelsey has returned from Carthage, where his assistants have just successfully terminated the excavation of a concession. He has gone to London; then he returns to Ann Arbor for a few months.

The following gifts have come in:

\$1,000 from Mrs. Mary Brooks Otis for general expenses.

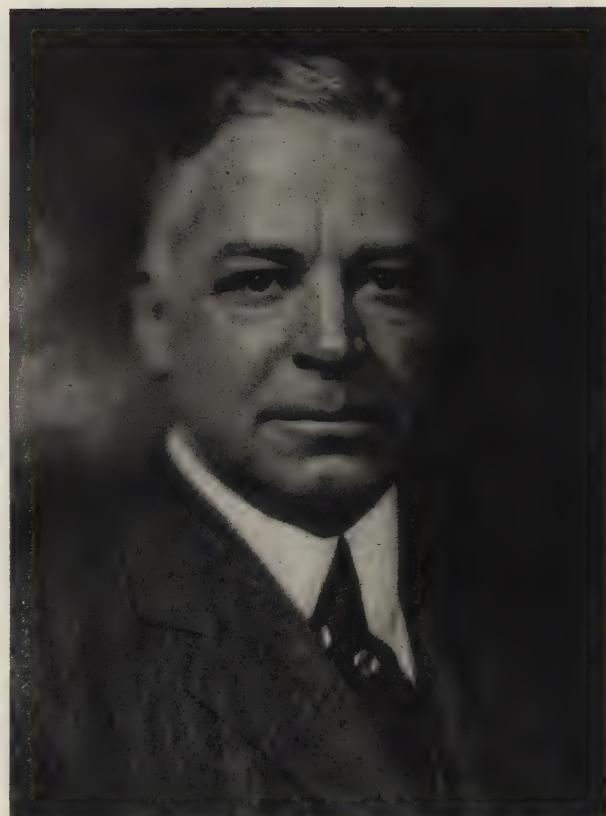
100 lire, anonymously for general expenses.

"Members of the Academy are beginning to scatter. Prof. and Mrs. Merrill of the Classical School have permanently left and so have a number of students of that School."

"Sculptor Tom Jones and wife walked into my office this morning. They are staying with Professor Fairbanks. Jones has a commission to execute.

"During the first days of the month, I attended an archaeological gathering in Tripoli. The Governor of Tripoli invited about fifty representatives from approximately a dozen different nations to be his guests in Tripoli and to see, in addition to Tripoli itself which is very interesting, the important excavations, which he is making at Sabathra and Leptis Magna. We also made one or two trips into the heart of the country with the Minister of Colonies, and we thus had an exceptional opportunity to see some of the habits and customs of the natives. The Italians have done a great deal to raise the standard of living throughout the province. The latter is well worth visiting, and can now be reached conveniently by boat from Naples, Syracuse and Malta."

"All Rome has been treated to a most unusual sight, namely, the illumination of the dome and the Piazza of St. Peter's. Thousands of electric lights and flickering torches vied with one another in producing a gorgeous effect. The great dome fairly vibrated with life."



DONN BARBER

DONN BARBER died at his home, 125 East Seventy-fourth Street, in his fifty-fourth year, on May 29th, 1925.

He died after a short illness and had hoped to make the new Broadway Temple his crowning achievement.

Mr. Barber probably was one of the most versatile of the artistic leaders in this country, and death came just as he was at the peak of a brilliant career in architectural work, displayed in many buildings in New York and in other cities.

Secretary Herbert Hoover had appointed him as the American delegate to represent architecture in the International Exposition of Modern Decorative and Industrial Art, now being held in Paris, where he was scheduled to speak on June 20.

Mr. Barber was a champion of simplicity and an ardent advocate of durable construction in this country. He gave time between the designing of the Hartford, Connecticut, Tower and the State houses in various parts of the country to develop the plan for the solution of the problem of congestion for the 7,000,000 people of New York. In addition to this he championed the work for "Better Homes in America", preached it on many occasions and gave freely of his time and his talents to the practical development of these programs.

But the ambition of the closing days of his life was the building of the Broadway Temple. It was said by those interested in this project that Mr. Barber originated the idea of this new type of American self-supporting cathedral, and that when pictures of last plans for it were distributed over the country he received more than 5,000 letters of inquiry about it.

Mr. Barber's career was brilliant from his student days in Paris, where he completed the work of the Ecole des Beaux Arts, in 1898, in the shortest time of record. He was the first American architect received as a member of Beaux Arts, and was decorated both by the French and British Government for his distinguished work. Mr. Barber was President of the Architectural League of New York and took this office last May.

He was born in Washington, D. C., Oct. 19, 1871, and was a descendant of Thomas Barber who came to America in 1634 and settled in Windsor, Conn. After grad-

PENCIL POINTS

uating from Yale, class of '93, and having determined to follow the profession of architecture, he took a special course at Columbia University during 1893-94, and then went to Paris to continue his studies. He was one of the originators of the atelier idea in the United States, and was head of Atelier Donn Barber, which made it possible for young and ambitious students to become successful architects. His pupils have been winners of many scholarships.

Among the more important monuments that testify to the value of his work in New York are the New York Cotton Exchange, National Park Bank Building, Mutual Bank, Lotos Club Building, Randall's Island Hospital group, Institute of Musical Art Structure, National Headquarters Building, Central Branch of the Y.W.C.A., Knickerbocker Hospital, and Dramatists Theatre.

Few architects have covered the wide range of subjects that were entrusted to Mr. Barber over the period of twenty-two years that he practiced under his own name. He designed a number of admirable private houses, including those of Edward H. Litchfield, the late E. C. Converse, Horatio S. Shonnard, E. S. J. McVickar, Richard Delafield, Lorenzo D. Armstrong, William B. Dinsmore, Adrian H. Larkin, E. S. Ryenal, Charles Smithers, Waldron Williams and H. Edward Manville.

Mr. Barber was the architect for many buildings in the South and in New England and was consulting architect in charge of design for the Yale Bowl. He won from twenty of the foremost architects in the country the Department of Justice Building for Washington, D. C., The Connecticut State Library, Traveler's Insurance, Supreme Court Building and the Hartford National Bank Building, all of Hartford; the Chattanooga Union Station buildings at Chattanooga, Tenn.; the Capital City Club at Atlanta, Ga., and the White Plains Hospital are other interesting examples of his work.

He was editor of the *New York Architect* for four years, and President of the Society of Beaux Arts Architects in 1909 and 1910. At the annual Beaux Arts ball, given for the benefit of struggling students, he was always one of the principal figures. In 1923 he represented the American Institute of Architects and appeared before the Board of Estimate against the proposed demolition of High Bridge.

Mr. Barber was also a member of the National Academy of Design, National Sculpture Society, and an honorary corresponding member of the Royal Institute, British Architects.

Among his clubs were the Union, University, Century, Lotos, Players, American Yacht, Apawamis, Racquet and Tennis, Westchester County Hunt, and Knollwood Country.

Mr. Barber was married to Miss Elsie Yandell, a daughter of Dr. and Mrs. Lunsford Pitt Yandell and sister of Enid Yandell, the sculptor, in Louisville, Ky., on Nov. 22, 1899. He is survived by his wife, three daughters, Mrs. Joseph Larocque Jr., Mrs. Richard S. Hoffman, Miss Elsie Y. Barber, and a son, Donn Barber, Jr.

PERSONALS

MORRIS ROTHSTEIN, ARCHITECT, has removed his offices to 186 Joralemon Street, Brooklyn, N. Y.

ERIC J. REEVES, LANDSCAPE ARCHITECT, KARL W. KRANZ, ASSOCIATE, have removed their offices to 505 Delaware Avenue, Buffalo, N. Y.

THEODORE H. SKINNER, CONSULTING ENGINEERING AND ARCHITECTURE, has removed his offices to Room 710, 103 Park Avenue, New York.

ADAMS & ADAMS, ARCHITECTS, have removed their offices to Builders Exchange Building, San Antonio, Texas.

FRANK DUNHAM has opened an office for the practice of architecture at 1010-11 Tribune Building, Tampa, Florida. WELBY N. PUGIN AND HAROLD C. WALLACE have opened an office for the practice of architecture and civil engineering under the firm name of Pugin and Wallace, with offices at 149 Sixth Avenue North, Nashville, Tenn.

HARRY LUCHT, ARCHITECT, H. G. ANDERSON, ASSOCIATE, have removed their offices to 432 Palisade Avenue, Cliffside Park, N. J.

CHARLES A. RAIG AND RICHARD H. FOX have opened an office for the practice of architecture in the Columbus Building, Westfield, Mass.



Plate made by Herbert S. Rosenberg, New York, as collateral work for the "History of Ornament" Course, given by Professor Hamlin at Columbia University.

UNIVERSITY OF LOUISVILLE

THE University Archi-Arts Society of the University of Louisville brought a successful year to a close on Thursday evening, May 21, with a big banquet, attended by thirty students, professors, draftsmen, and architects. The old drafting room was draped with colored crepe paper, its walls were covered with drawings made by the students during the past year, and with its horseshoe of white tables surrounded by merry faces it presented a very jolly sight. After everyone had eaten, the program of the evening began. The students were first introduced to the visitors by a song, each verse of which was about a different boy. The speeches of the evening followed, and there were plenty of them. Of course these speeches were varied, but the substance of them was: rejoicing at the success of the past years, farewell to the old quarters, and encouragement for the future. After the talks were over, Mr. W. E. Glossop, teacher of the class, awarded books—prizes given by Messrs. D. X. Murphy, J. C. Murphy, W. E. Glossop and W. O'Toole—to the following students for their work during the past year: E. C. Lea, president of the society, first; Stratton Hammon, second; R. E. Schwab, third; and Robert Hunn, Jr., Arthur Drabnick, and Joseph Rademaker, fourth. The meeting was then brought to a happy close.

The members of the University Archi-Arts Society hope that the other clubs have had as successful a year and wish them progress for the future.

Respectfully submitted,
Robert W. Hunn, Jr., Sec.

UNIVERSITY OF MICHIGAN

THE legislature of the State of Michigan has just made an appropriation of \$400,000 for the first unit of a building for the architectural school of the University of Michigan. This is probably the first time that a state legislature has made an appropriation for such a purpose.

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COLLEGE OF ARCHITECTURE, UNIVERSITY OF MICHIGAN

THE GEORGE G. BOOTH Traveling Fellowship in Architecture has been awarded to Kenneth C. Black of Lansing, Michigan. Honorable mention was awarded to LeRoy E. Kiefer of Detroit, there being four other competitors. This is the second year that the Fellowship has been awarded, which carries with it a stipend of \$1,200. Mr. Kiefer, the runner-up, is to receive \$150 given by the Detroit Chapter of the American Institute of Architects.

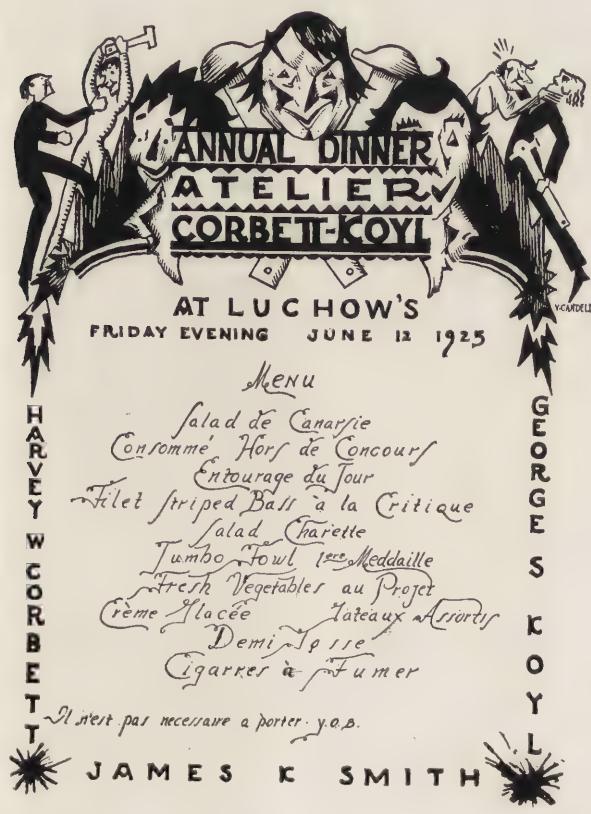
The jury consisted of the following architects:— H. J. Maxwell Grylls, President Detroit Chapter A.I.A.; William B. Stratton, Past-President of the same Chapter; John B. Jewell, President of the Detroit Architectural Club; and Mr. Wirt Rowland, of Smith, Hinchman & Grylls, Detroit; and five members of the architectural faculty.

In the opinion of the faculty, there is an improvement in the designs submitted by the competitors this year over those of last year, and this improvement it is hoped will go on from year to year.

The purpose of the scholarship is to further a higher standard of preparation for architectural practice, the stipend being based on the endowment of \$20,000 given last year by Mr. George G. Booth of Detroit. Mr. Booth has taken a fine constructive interest in the architectural school, and along with the architects of the state has done much to co-operate with the faculty in advancing the school's standards and interest.

AN INVITATION.

THE example set by the Pittsburgh Architectural Club in contributing the material for the "Here and There" department in this issue of PENCIL POINTS starts something which we feel is well worth carrying on by other Clubs located in different parts of the country. Come on you Architectural Clubs and line up for future issues! Any reasonable amount of space will be allotted by arrangement to other Clubs, thus giving the members an opportunity to display their talents and put themselves and their city on the map, so to speak. Each organization may use its own ingenuity in selecting the material to be presented, subject only to reasonable editorial supervision at this end.



HERBERT J. POWELL

HERBERT J. POWELL, winner of the Shelden Travelling Fellowship from Harvard for 1924-25, has just returned from his travels in England, France, Italy and Spain. On another page of this issue we reproduce one of the many excellent pencil drawings made by Mr. Powell while travelling on the Fellowship.

Mr. Powell was born in Redlands, California, and was graduated in Engineering from the University of Redlands in 1920. He received his M. A. in architecture from Harvard University, School of Architecture, in 1924. While at Harvard he was presented with the Medal of the American Institute of Architects for general excellence in his work. Mr. Powell has been in the office of Mowll & Rand, and of Kilham, Hopkins, & Greely, both of Boston. At the present time he is with McKim, Mead and White, New York.

ATELIER CORBETT-KOYL

LUCHOW'S was the scene of the annual Patrons' dinner of the Atelier Corbett-Koyl, which took place on Friday evening, June 12. A jolly good time was had by all; the only disappointment being the absence of our inspiring patron, Mr. Corbett, who was out of town.

However, Mr. J. K. Smith, who has taken Mr. Koyl's place as patron, set forth his views on Atelier spirit. The rest of the evening was given over to frolic and song and the spirits which hovered low over the festive Board.

Victor Pribil, massier, presided as Toastmaster, ably assisted by his cohorts, Mr. F. J. Ryan, "souse" massier, W. G. Eichler, Secretary, and Albert Mohr, chairman, and the dinner committee.

Our friend the photographer who came to shoot the works, we are sorry to say, was the first casualty of the evening so, gentle readers, we must disappoint you with the Rogues' Gallery. The boys endeavored to take the flashlight but failed miserably because the powder was wet and the tripod lost a leg in this annual scrimmage.

Martin Beck, who just won the hundred dollars for his successful solution for the Aeroplane Landing Station, was given quite an ovation as he left to sail for France. You see it was quite an exciting evening.

Mr. Victor Candell designed the menu card. After the dinner we all went to the Village.....in taxis.

PENCIL POINTS

BOOK NEWS

Under this heading we shall publish brief notes of new books of interest to our field. Space does not permit of extended reviews but further information regarding any of the books may be secured from the publishers of the books themselves and may be ordered either through us or direct from the publishers thereof.—Ed.

Provincial Houses in Spain, by Arthur Byne and Mildred Stapley. A handsome volume containing 190 plates, 12 x 16, with suitable text dealing with the subject indicated. Published by William Helburn, Inc., N. Y. C. Price \$25.00.

Architectural Construction, Vol. 1, by Voss Henry. A comprehensive book of 1267 pages, 9 x 12, dealing broadly with modern construction, with chapters on building materials and much other information of use in the drafting-room. Published by John Wiley & Sons Co., Inc., N. Y. C. Price \$20.00.

Standard Practical Plumbing, by R. M. Starbuck. A practical book of 432 pages, 6 x 9, covering subject indicated. Published by Norman W. Henley Publishing Co., New York. Price \$3.50.

House and Garden's Second Book of Houses. A book of 192 pages, 9 x 13, containing about 600 illustrations on the subject of the modern residence. Published by House and Garden, New York. Price \$5.00.

Principles of Decoration, by R. G. Hatton. A volume of 224 pages, 6 x 9, with numerous drawings covering the subject indicated. Published by Charles Scribner's Sons, New York. Price \$3.50.

The Home Owners Hand Book, by A. C. Lescarboura. A guide for buying, planning and building. A book of 494 pages, published by the Scientific American Publishing Co., New York. Price, post paid, \$2.65.

Manual of Office Practice, by Frederick J. Adams, A.I.A. A tabulation of instructions covering the routine of an architectural office. 96 pages. Published by Charles Scribner's Sons, New York. Price \$1.25.

American Colonial Architecture, Its Origin and Development, by Jos. Jackson. An illustrated treatise with a bibliography and index. 228 pages. Published by David McKay Co., Philadelphia, Pa. Price \$2.00.

School Bonds, by John Guy Fowlkes, Professor of Education, University of Wisconsin. A guide for the



complete financing of a school building program. 180 pages. Bruce Publishing Co., Milwaukee, Wis. Price \$2.25.

Drafting Room Mathematics, by De Witt C. Pond. Problems of the drafting-room simply and clearly explained for the draftsman and architect. 153 pages. Published by Charles Scribner's Sons, New York. Price \$2.50.

The Autobiography of an Idea, by Louis H. Sullivan, with foreword by Claude Bragdon, 329 pages. Published by the Press of the American Institute of Architects, New York. Price \$3.00.

History of the Portland Cement Industry, by Robert W. Lesley. Covers subject indicated fully. 330 pages, 6 x 9. Published by the International Building Press Inc., Chicago. Price \$3.00.

Practical Steam and Hot Water Heating, by Alfred G. King. A book of 551 pages, 6 x 9, covering the subject. Published by Norman W. Henley Publishing Co., New York. Price \$4.00.

COMPETITION FOR DESIGNS FOR ORNAMENTAL IRON WORK

J. G. BRAUN, as set forth more fully on another page of this issue, is offering money prizes for designs for ornamental iron work. This competition is open to all architects, draftsmen, designers, students of architecture and workers in iron. The purpose of the competition is to stimulate a wider interest in ornamental iron work and its application to various classes of modern buildings and was suggested by Mr. W. M. Buchroeder of Richmond, Va. All communications regarding this matter should be addressed: Ornamental Iron Contest, care J. G. Braun, 160 Greene St., New York.

EBERHARD FABER SKETCH COMPETITION

THE prize winners in the Eberhard Faber Sketch Competition are as follows: First prize, Miss Lizzie J. Koch, River Edge, N. J.; second prize, Mr. R. Alex. Willson, 646 Washington St., Mt. Lebanon, Pa.; third prize, Miss E. M. Rogers, c/o Gage Printing Co., Battle Creek, Mich.; fourth prize, Mr. John W. Schmidt, 2015 Flatbush Ave., Brooklyn, N. Y.; fifth prize, Mr. Carl Jensen, 1034-74th Street, Brooklyn, N. Y.; sixth prize, Mr. Otho McCrackin, 722 R. W. Bldgs., Hutchinson, Kansas.

The sketches submitted in this competition were judged by Mr. F. R. Gruber, Mr. Franklin Booth and Mr. J. C. Leyendecker.



The Above Reproduces a Program Card Gotten Out by the Architectural Modelers Guild of Perth Amboy, N. J., in Connection with their Outing held on June 6th.

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RESULTS OF THE VERMONT MARBLE COMPETITION

THE memorial design competition closed April 1st, and on April 7th the judges met at the company's New York branch and awarded the prizes. Among the three hundred odd designs submitted, were contributions from architects and designers in practically all parts of the country. The fact that honorable mention was accorded to work produced in cities as far apart as Saint Louis and Toronto, is good evidence that the interest in the contest was confined to no one locality. Thirty states were represented, and one hundred and six towns. There was one entry from Cuba and one from London.

Four prominent architects acted as judges: Charles A. Platt and John Oakman of New York, Guy Lowell of Boston, and C. C. Zantzinger of Philadelphia.

By a strange coincidence both the first prize of \$400 and the second prize of \$200 went to the same man—Alfred C. Cass of New York. The third prize (\$100) was also won by a New Yorker—Aaron A. Kiff. Seventeen men received honorable mention (\$25) as follows:

Norman Issott	Omaha, Neb.
Edward F. Toney	Niles, Mich.
Pierre Lord	Chestnut Hills, Mass.
Phil. A. Moe	Rockford, Ill.
Merrit F. Farren	New York City
Clarence O. Morrison	Brooklyn, N. Y.
P. M. Torracca	Cincinnati, Ohio
C. B. Tandy	Denver, Colo.
James C. Green	New York City
Melville Wood	Toronto, Ont.
Victor E. Johnson	Monroe, La.
Donald M. Douglas	New York City
H. A. Wieland	Buffalo, N. Y.
Emil Pozzi	Morristown, N. J.
(unsigned)	St. Louis, Mo.
(unsigned)	St. Louis, Mo.

The chief purpose of the contest was explained in the announcement: "As most small monuments are bought from stock, any improvement in their design must come through the effort of the manufacturer. The Vermont Marble Company, desiring to use only the best obtain-

able designs, hopes through this competition to draw upon the skill and taste of the best designers."

There was more to it, however, than a mere bid for designs. There was an effort to awaken interest in the subject of cemetery memorials, and to uncover latent talent in the field of creative art. It is felt that this competition has accomplished much along these lines.

DRAFTING ROOM PRACTICE

(Continued from Page 69)

This suggests immediately the obvious thing of blocking out these various sections as the work progresses on small pieces of tracing paper, adding notes in script and then arranging these sheets in a sane and orderly fashion under the large sheet of tracing paper or cloth ready for tracing. The same scheme may be used to study the arrangement for all drawings. It may be done at one quarter full size, say. This system has its adherents, but the drawings at final scale may be made to serve an additional purpose as well and, if not too carefully done, require less time than the scaling of them at one quarter the size.

Again as to the small sections and plans. The number of questions that arise during the progress of a building are just about in inverse ratio to those brought out in this article. Worked out in advance they save untold blunders. It would be interesting to know on a big job how many times some particular detail has been thought out by different draftsmen but not recorded in a finished drawing. Each in turn gives it thought and time to satisfy himself that the thing will work, and that is all. The next fellow does the same thing.

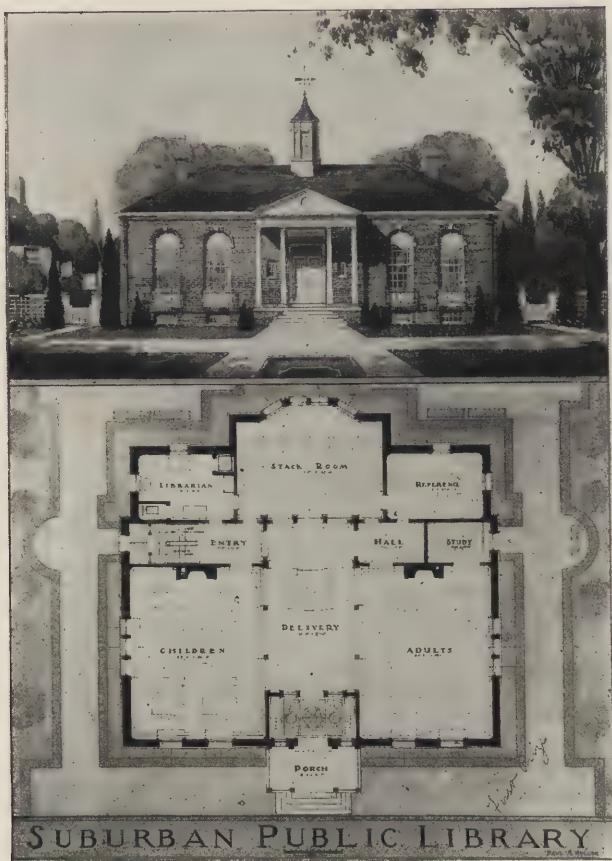
Summing up the draftsman's job we find it is as the lawyer said about law—it is just common sense after all. Keep our eyes open to what the other fellow is doing and just use common sense. When it comes to the new methods and devices let's not be like the member of a certain organization who said, "We can't do that, it's never been done before."

We will pay 25 cents a copy for issue of **PENCIL POINTS** for March, 1922. Address Box K. G. care of **PENCIL POINTS**.



Central Portion of Causeway Between Rockaway Beach and Sandy Hook Proposed by Colonel William J. Wilgus, C. E. Drawing in Carbon Pencil by Francis S. Swales.

PENCIL POINTS



*1st Prize in the Brooklyn Chapter, A. I. A., Competition by
Paul N. Heller. Student at Pratt Institute, N. Y.
George Axt and Arthur L. Guptill, Instructors.*



A Country Residence, by Bruce A. Mapes. 2nd Year Architectural Design, Pratt Institute, Brooklyn, N. Y. Arthur L. Guptill, Instructor.

PENCIL POINTS

JOHN RUSSELL POPE APPOINTED ARCHITECT FOR NEW YORK STATE ROOSEVELT MEMORIAL.

(Continued from page 81)

Mrs. William H. Good, of Brooklyn, Architect, Mr. William Richard Kendall, Architect, Mr. Milton B. Medary, Jr., who met in the office of the Trustees in the American Museum of Natural History on Monday, June 1st, and Tuesday, June 2nd, for the consideration of the eight anonymous plans which were submitted.

After an extended and most deliberate consideration in which the advice of Messrs. Kendall, Medary and Butler was sought and freely given, the choice of the jury fell upon the architect of plan No. 6, which proved on opening the sealed envelope to contain the name of the successful competitor, Mr. John Russell Pope.

The seven remaining Architects it developed were J. H. Freedlander, New York City; Gordon & Kaelber, Rochester, N. Y.; Edw. B. Green & Son, Buffalo, N. Y.; Helmle & Corbett, New York City; H. V. B. Magonigle, New York City; Trowbridge & Livingston, New York City, and York & Sawyer, New York City.

The Trustees were unanimous in their opinion that the choice had fallen on one of the ablest of representative American Architects. Shortly there will be taken up again many of the difficult problems which enter into the solution of the plan and Mr. Pope will make any necessary revision of his competitive drawings.

The ten dollar prize for the most interesting contribution in the "Here and There" department for June goes to Nathan Barth, Montreal, Que., for his very ingenious cipher puzzle as published on page 91.

Mr. M. L. Scheffer, manager of the Architectural All-Stars, 101 Park Ave., New York City, care Donn Barber, announces that he is desirous of booking games with all architectural organizations within a radius of one hundred miles of New York City.

Herbert Lippmann, 62 W. 45th Street, New York wants a copy of PENCIL POINTS for March, 1925.

R. L. White, architect, Austin, Texas, is anxious to secure a copy of PENCIL POINTS for January, 1921.

Mr. Wayne Everett Bell, 704 Mutual Home Bldg., Dayton, Ohio, requires a copy of PENCIL POINTS for December 1924, to complete his file.

J. Bradbury Minott, 43 No. Laurel St., Hazelton, Pa., needs a copy of PENCIL POINTS for October, 1924.

Pablo S. Antonio, care Mas Construction Co., 407 Salasar Bdo., Manilla, P. I., requires copies for November and December, 1924.

Rudolph Villani, 1931 E. Pratt St., Baltimore, Md., desires copies for December, 1924 and February, 1925.

"A Subscriber", care PENCIL POINTS, will pay 35c each for the following copies of PENCIL POINTS delivered to the office of the publication. June, July, August, September, 1920, January, February, March, April, May, December, 1921, January, 1922.

SPENCER & PHILLIPS, ARCHITECTS, (A.I.A.) Fidelity Bank Bldg., Memphis, Tenn., are opening branch offices at Miami and West Palm Beach, Fla., and wish to get in touch within the next couple of months with several first class men, good at sketching and capable along general lines; especially men experienced in high class Gothic Church work, hotel and other commercial work and with Spanish style as used in Florida and California. Opening for several men in Florida and one or two in Memphis office. All of the above desirable requirements do not have to apply to any one man. Write fully in applying.



Studies by Kate M. Kruth, Costume Illustration Class, Pratt Institute, Brooklyn, N. Y. Ida M. Haskell, Instructor.



Roman Lettering from Hübner's "Exempla Scripturae Epigraphicae Latinae,"
Pompeii, in Theatro, Tabulae Marmoreae Litteris Pulcherrimis; Extant in Museo Neapolitano.

IVLIAE AVGVSTAE
GERMANICI CAISARI
AGRIPPINA

1.

SENATVS
POPVLVS QVEROM ANVS
DIVOTITODIVIVESPASIANIF
VESPA SIA NOAVGVSTO

2.

A TERENTIO A F VARR
MURENAE
PTOLEMAEI CYRENENS
PATRONO

3.

Roman Lettering from Hübner's "Exempla Scripturae Epigraphicae Latinae."

1. *Caere, Tabula Marmorea; in Museo Lateranensi.*
2. *Romae, in Arcu Titi in Summa Sacra Via, Litteris Aere Olim Incrustatis; Ex Imagine Photographa.*
3. *In Civitate Lavinia (Gentiani, Inter Aricium et Nemus Diana), Tabula Marmorea; Romae in Museo Capitolino.*

SPIRITRANIVS SESTENI PRON. FAB
PROCVIVS GELIANVS.
PRAEFABRII PRAEFCVRATORVM ALIE
TIBERIS PRAEFERRORIDINAVRBEADINIO

1.

ISTACIDIANE
RVFILLA SACERD
PVBLICA

2.

MESCONIAEE
VENERIAE

3.

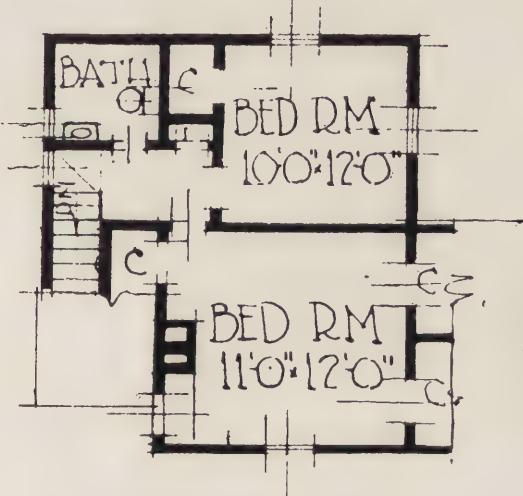
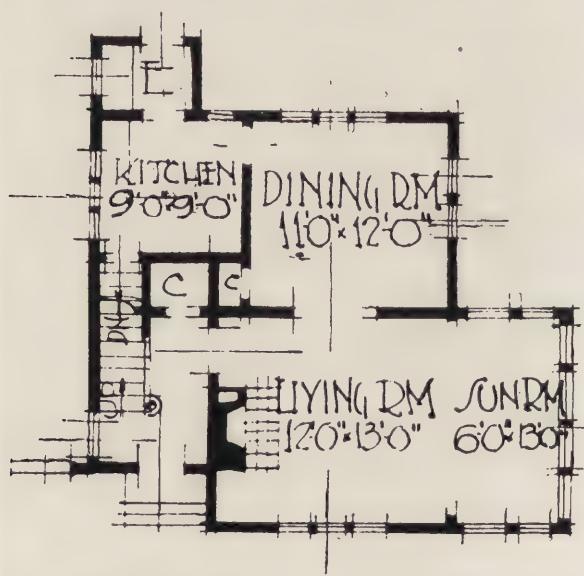
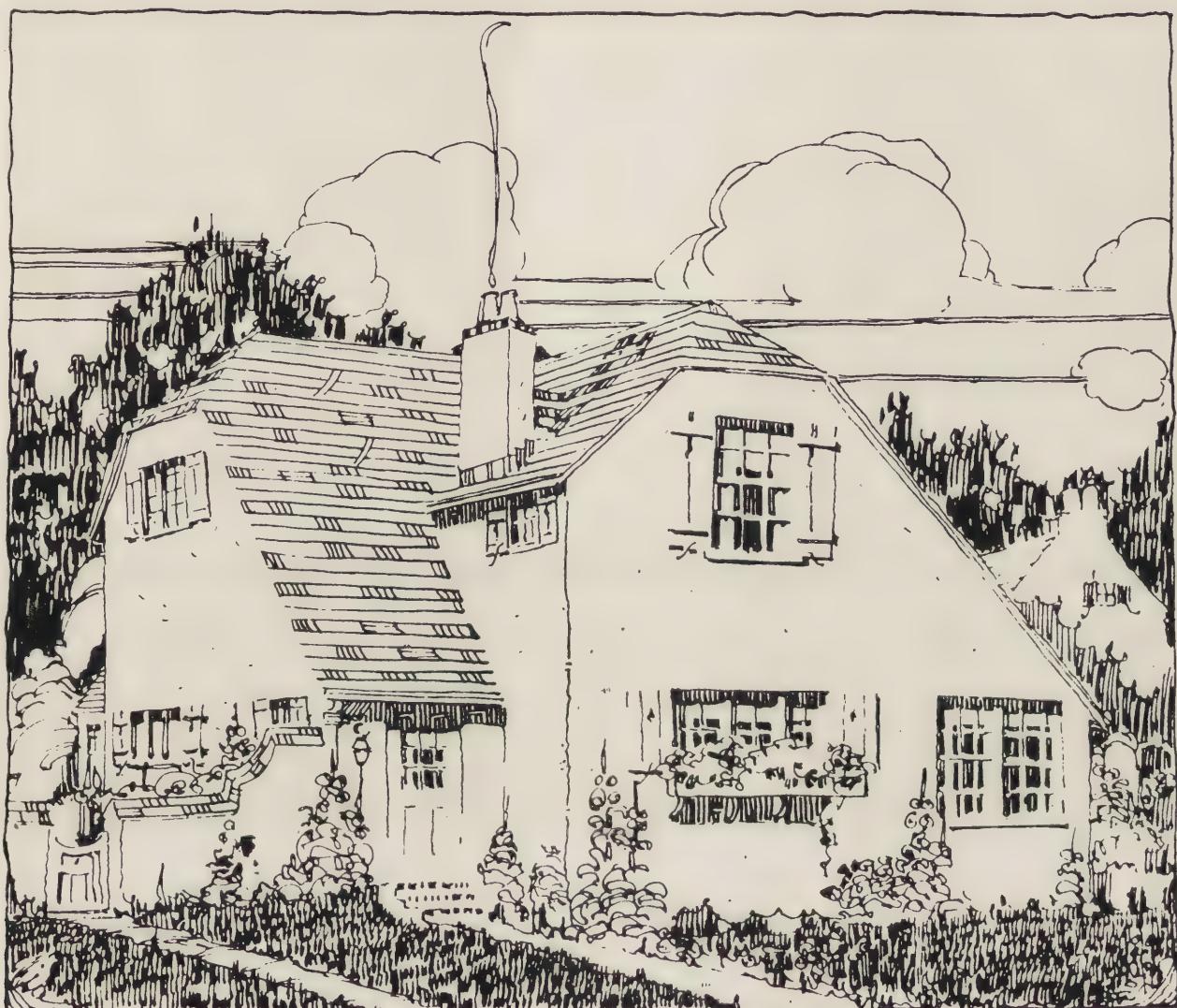
Roman Inscriptions from Hübler's "Exempla Scripturae Epigraphicae Latinae."

1. Pompeii, Parva Basis *Ex Marmore Nigro*; in Museo Neapolitano.

2. Pompeii, Cippus Hermae Similis *Ex Marmore*; in Museo Neapolitano.

3. Pompeii, Cippus Hermae Similis *Ex Marmore*; in Museo Neapolitano.

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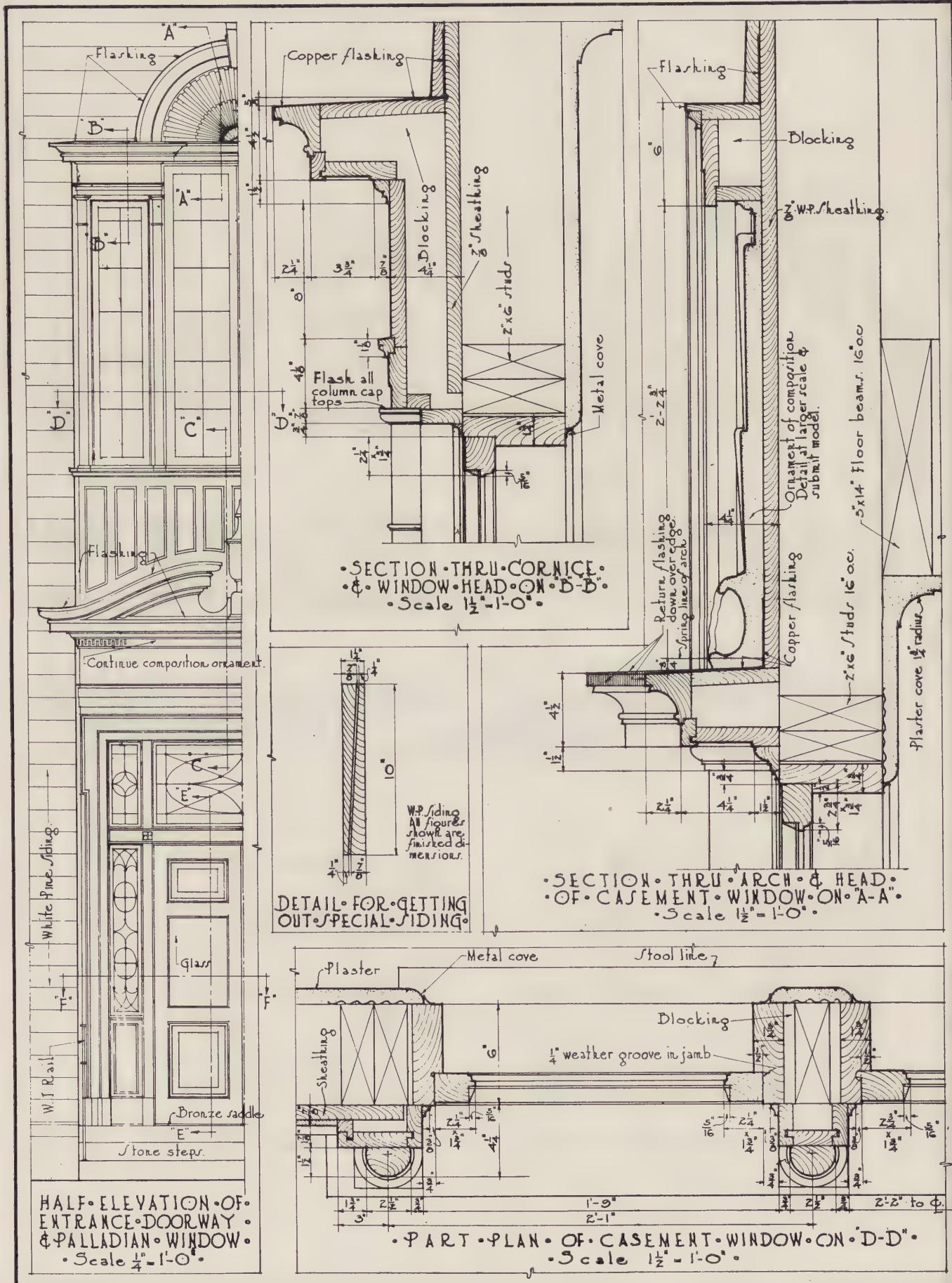


FIRST FLOOR PLAN.

SECOND FLOOR PLAN.

Design for a Small House. Royal Barry Wills, Architect. Boston, Mass.

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Doorway and Window Details. This is one of the plates from Part II of "Good Practice in Construction," by Philip G. Knobloch, now in course of Preparation by the Publishers of Pencil Points.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART IX.

GENERAL CONDITIONS, *Continued*

THE foregoing completes the portion of the General Conditions which may be considered as essential and invariable for all major construction awarded under a general contract. There should immediately follow those "Special Conditions" or "Supplementary General Conditions" of which we gave a rather complete elucidation in Part IV of this series. These will vary for different buildings and in different offices, but each office has them more or less standardized as best serves their work.

There will also be variation more dependent upon the size of the job than is the case with the general conditions. Even for the latter, however, it is advisable that more than one form be used. The long form given in Part VIII should be considerably curtailed for small jobs and for minor contracts on larger jobs as we will later show.

The following paragraphs are so arranged that the first portion may be standardized and certain of the final paragraphs, as found necessary, varied as occasions demand. (It will be remembered that we are reproducing a complete specification for a consolidated district school building).

SUPPLEMENTARY GENERAL CONDITIONS

ART. 22. SCHEDULE OF DRAWINGS.

(A) THE DRAWINGS referred to in Art. 3 and made part of the Contract Documents are as follows:—

(Here follows a list of all drawings submitted to Bidders.)

ART. 23. LIST OF ADDENDA:

(A) THE ADDENDA referred to in Art. 3 and made part of the Contract Documents are as follows:—

(1) ADDENDUM NO. 1.

(Here follows addenda in regular numerical order, if there be any.)

ART. 24. TEMPORARY WORK AND EQUIPMENT.

(A) SUPERINTENDENT'S OFFICE. The Contractor shall, immediately after award of contract, furnish a substantial, weatherproof building at the site, containing an office for the Architect's Superintendent, of 120 sq. ft. floor area. It shall be fitted with movable sash, substantial door (with butts, latch and cylinder lock), table for blue-prints, desk with drawers, chairs and locker. This building shall be constructed under direction of the Superintendent.

(B) CONTRACTOR'S OFFICE at site shall be a substantial building and the proper place of deposit for copies of the drawings and specifications and all file records pertaining to the work. The Contractor or his Foreman shall be constantly in charge of same during working hours and shall there receive all orders and instructions. This office shall not be used for storage of materials nor as a loafing place for Employees, for which purposes the Contractor shall maintain such other sheds as are necessary.

(C) TELEPHONE SERVICE shall be provided by the Contractor at the site in location approved by the Superintendent, for their joint use and for the use of others when necessary in connection with work on the building.

(D) TOILET CONVENiences for all Persons employed on the work shall be constructed and maintained by this Contractor in accordance with local ordinance, properly lighted and kept clean and sanitary, to the approval of the Superintendent.

(E) STAIRS, SCAFFOLDING, RUNWAYS, LADDERS and similar appliances shall be provided by the Contractor, of sufficient strength and rigidity wherever necessary for all trades of this contract. There shall be not less than one set of double ladders from basement to each floor and roof to every 12,000 sq. ft. (or less) of floor area until same is provided with stairs. Temporary stairways of 2" planking, with substantial rails and guards, shall be provided connecting grade with each other level as fast as building progress will permit. Permanent steel stairs or rough construction of other stairs may be used for this purpose if properly protected.

(F) TEMPORARY PLANKING shall be provided where required for flooring over portions of framing in order to facilitate work above same.

(G) ENCLOSING BUILDING. As soon as construction is sufficiently advanced, this Contractor shall enclose the building, using temporary tight-board barriers and doors (with suitable locks) in all outside doorways. When plastering is complete (or sooner, if weather conditions necessitate), all window openings shall be closed with permanent glazed sash. In summer time, finished wood sash shall not be installed for enclosing building before or during plastering. If such enclosing is needed, the Contractor shall provide muslin sufficient for the purpose.

(H) PAINT SHOP. The Contractor shall set aside a room or rooms as soon as possible after building is enclosed, to be used as a paint shop, to and from which all wood finish shall be taken by this Contractor. This space shall be completely enclosed with temporary doors and sash and made dry for Painter, using salamanders or stoves, if needed. When this paint shop is thoroughly dry, finish woodwork may be stored therein but will not be allowed elsewhere in the building until all concrete and plastering are finished and dry.

ART. 25. MECHANICAL CONVENiences.

(A) HEAT FOR MATERIALS. The Contractor shall provide all necessary heat to warm aggregate, protect concrete, dry plaster and as may be needed for any other work in this contract, using therefor methods approved by the Architect.

(B) HOISTING PLANT. The Contractor shall provide, install and operate ample hoisting plant (or plants) as needed to insure maximum speed in prosecution of the work, consistent with safety and good construction. The location, character, capacity and details of construction and operation of all hoists shall be subject to approval of the Architect, but such approval will not relieve the Contractor from all responsibility for damage due to defects in or operation of any hoisting apparatus or parts thereof. Stacks of steam boilers shall be of sufficient height to carry smoke above all parts of the work in progress or complete.

(C) TEMPORARY HEAT FOR BUILDING. This Contractor shall provide such temporary heat as may be necessary for the work in the building, subject to approval of the Architect. After heating plant is in readiness, this Contractor shall operate same (when heat is needed) for the benefit of all having work in the building and until completion of this contract, during which time the temperature in the building shall not be allowed to fall below 40° F. The Contractor shall provide suitable fuel and attendance for the plant and shall properly care for same. Before its final acceptance, he shall replace or repair any portions that have been damaged while in his care, to the satisfaction of the Architect.

(D) LIGHT, POWER AND WATER. This Contractor shall provide all temporary light and power necessary to the operations under this contract, including connections needed to supply same. He shall also provide water for his own and all other operations in connection with the building. The Owner will provide City main tap, meter and cut-off, from which this Contractor shall extend such piping as is needed, with hose-bibbs for the use of all requiring same.

ART. 26. RESPONSIBILITY FOR PREMISES.

(A) THE BUILDING AND PREMISES will be in charge of this Contractor who will be responsible for same from the time site is turned over to him until the work of the contract is accepted.

(B) GUY WIRES AND ROPES shall not be attached to live trees nor may they extend outside property lines.

(C) KEEPING PREMISES CLEAN. The Contractor shall keep the premises clean and free from rubbish as provided in Art. 19 and shall see that each of his Sub-Contractors keeps his rubbish and waste material to a minimum and completely removes all that may remain when his work is complete. Paragraphs B and C of Art. 19 will be strictly enforced.

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ART. 27. PROTECTION.

(A) BOXING TREES. All trees and shrubs endangered by operations under this contract shall be carefully and adequately boxed with good planking before any hauling or excavating is begun.

(B) ALL WALKS, CURBS AND FENCES that are to remain shall be adequately protected wherever liable to damage. Sections of fence may be removed for passage and stored on premises, then placed in original condition at completion of work.

(C) SAFEGUARDS. In addition to the safeguards called for in Art. 11, the Contractor shall provide such temporary walks and fences as may be required, also guard-rails around well-holes, plank protection of all projecting masonry below cornice and of jambs and sills of openings used for passage, and shall maintain such guard and protection members until work is completed or same are ordered removed. Temporary fences, walks and sidewalks enclosures shall conform to ordinances and to drawings and details, where same apply.

(D) EXPOSED FOUNDATION FOOTINGS shall, in cold weather, be protected by straw or other approved material, sufficient to prevent damage from frost.

(E) SNOW AND ICE shall not be allowed to remain on any part of the structure (other than finished roofs), but shall be removed by this Contractor as soon as possible in every case, until completion of exterior of building.

(F) STORM-WATER and water from springs and pipe-leaks shall be adequately guarded against by ditching, plumbing or other means.

(G) WATCHMEN shall be provided by the Contractor during time premises are under his control, to furnish adequate protection to all parts of the building and site at all hours when, in the judgment of the Contractor or the Superintendent, conditions make such protection advisable.

ART. 28. PROCEDURE.

(A) LINES AND LEVELS. The Owner will have established lot lines and restrictions which are matters of record. The responsibility for all other lines and levels necessary for proper location and erection of the building and appurtenances rests upon the Contractor who shall employ a competent Instrument Man. Points from which finished floor and wall surfaces in each room can be determined shall be established and maintained by this Contractor for coordinating the work of the various trades. All bench-marks and reference-points shall be carefully protected.

(B) TIME SCHEDULE. The work shall proceed in general as stipulated in Art. 16, each branch of same being carried on and finished in ample time to assure completion of the major sections and the whole work on or before the dates fixed in the following schedule, which schedule is agreed by all concerned to be fair and reasonable and is based upon the assumption that the Contractor can take over the premises and start work on June 15th, 1925:

(1) Footings ready for column forms:	July 25, 1925.
(2) Foundations and masonry to grade:	Aug. 29, 1925.
(3) Walls ready for roof construction:	Oct. 31, 1925.
(4) Building enclosed:	Nov. 7, 1925.
(5) Temporary heat ready:	Nov. 14, 1925.
(6) Roofing completed:	Nov. 21, 1925.
(7) Plaster completed, except patching:	Dec. 31, 1925.
(8) Entire contract completed:	Mar. 31, 1926.

(C) DIVIDED PROCEDURE. (Where size of building permits) The Contractor shall proceed with foundations and masonry of one-half of building in advance of other half, when such procedure will operate to facilitate progress by enabling other trades to work in one section while masons are on the other. All floor construction, metal or concrete stairs, interior partitions and furring in each section shall be done story by story as rapidly as the progress of the work under other trades permits.

(D) PROGRESS PHOTOGRAPHS shall be taken at the expense of the Contractor, by a professional Photographer approved by the Architect, at intervals, as designated by the Architect, 12 negatives in all, on 8" x 10" plates. Three prints from each negative, mounted on linen, with binding margin, shall be delivered promptly to the Superintendent.

The following letter, submitted by Mr. John F. Gowen, of the Copper and Brass Research Association, comments upon the "General Conditions" as published in this department for June. It is hoped that others interested in this subject will feel free to add their comments to those of Mr. Gowen.—Ed.

PENCIL POINTS,

I HAVE read the Specification as published in your June issue with much interest. It is very well done, I congratulate Mr. Beach. All in all these are about the most lucid and least vague and involved "General Conditions" I have ever read.

However, there are several places where, unconsciously, the law of self-preservation has been at work. This is not unusual, for specification-writers are prone to write complete alibis for the architect into the "General Conditions." Not only is this unfair, but it is poor practice, because, in the first place, the experienced contractor adds an increasing percentage for every clause wherein the architect disclaims responsibility for his own errors, and in the second place, such clauses do not stand the scrutiny of the courts they often lead to.

This specification contains several of these "alibi" clauses. They are the inheritance of the past, when the building contractor and the architect did not understand each other as well as they do now. If they are corrected the "specification" will be in a class by itself.

I shall discuss the specification in order of its articles. You will note that there are one or two other points included.

1. Should not the paragraphs beginning "It is important . . ." following Art. I, sec. B, be moved to position in front of Art. I? This is editorial matter by Mr. Beach.

2. Art. II, sec. F. If the architect once approves materials or work of any kind, it is well nigh impossible to reject it later, unless fraud can be proven. I believe it has been established by the courts that clauses of this kind indicate an attempt by the architect to avoid responsibility for his acts.

In this clause there is no time limit except "later", which is indefinite and, if used literally, gives the architect unlimited power. Definitions of "later" and "defective" should be added to make the clause binding.

3. Art. III, sec. D. While this section is clear and concise it would be better to add, "However, upon request the architect will assist in delimiting the divisions of work". No matter how well done, there is going to be some confusion in the divisions, and the architect, who made them, will have to arbitrate all differences of this kind.

4. Art. III, sec. F. Here is the old clause by which the architect ducks responsibility for his errors of omissions—with a new tag to it. I believe the tag makes it sound the only difficulty being to prove that the work omitted from any of the documents is "clearly within the scope of the contract". This clause makes the contractor increase his bid by a bigger provision for contingencies.

I believe the contractor could be held to the proper execution of the work as shown by the reasonable intent of the Contract Documents as a whole without this clause.

My experience has been that the majority of these discrepancies (which are recognized by the courts as bound to occur) are found when the estimate is being made, and I have always made it mandatory for bidders to have them adjusted before bids are submitted, under penalty of no redress from the architect's decision or interpretation after the contract is signed. It is an open question as to which method is best. On small work (\$50,000) I have found that my method works admirably.

5. Art. III, sec. H. There should be some statement in this clause as to the obligation on the owner, through his architect, to furnish working plans at proper times, and in time to allow the work to progress satisfactorily.

6. Art. IV, sec. B. The architect who approves drawings cannot avoid responsibility for errors in them unless they are errors of detail, etc. For instance, an "approved" wrong general dimension, such as 110 for 100 feet, if it were copied from the original drawings of the architect, would not relieve the owner and architect of financial responsibility therefor. This is an attempt to eat and have one's cake, and the courts are fond of pointing

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out the errors in such clauses. It should be enlarged to include the errors for which the architect will assume responsibility.

7. Art. V, sec. A and B. These are excellent; so long as the architect remembers that, though he is being paid by the owner, he must be meticulous in his efforts to interpret the contract documents fairly. Because the documents say he is the "unbiased arbiter" doesn't make him so, and he has, under this clause, much greater responsibilities than if he remained the agent of the owner alone.

8. Art. V, sec. D. This is all right and usual, but, as everyone knows, it will be honored mostly in the breach. Therefore, why not admit it? If the contractor is wise he will make all verbal orders a matter of record by acknowledging them as soon as possible on his letter head, thus putting the onus on the architect. Unless the latter puts all orders in writing, a single verbal order constitutes a breach of contract. The clause is altogether too rigid. It is, moreover, a direct contradiction of Art. VI, sec. C.

9. Art. VI, sec. C. The second sentence of this clause infers "verbal" instructions and is in direct opposition to Art. V, sec. D. In the former the architect admits that he expects to give verbal orders by refusing to abide by the consequences of them only "in case of dispute"; in the latter the specification calls for a representative of the contractor to "carry out all instructions of the architect". Then the architect, knowing that he is going to give verbal orders and forget to back them up in writing, says "All such instructions shall be as binding as if given direct to the contractor". What is the contractor to do?

What is meant is that all orders given by the architect should be in writing, and, if given orally to the superintendent by the Clerk of the Works, or any other subordinate, shall be confirmed in writing. The architect cannot disclaim responsibility by clauses in the specification for normal and usual procedure, such as giving verbal orders. Why not be fair and recognize the way the work is going to be done? Here the contractor suffers for the vagaries of the architect. Let us suppose, the latter gives a verbal order which the contractor knows is wrong. Under Art. VI, sec. C he has to proceed for a day or so doing work in the wrong way, waiting for the written confirmation of it he has asked for. The architect, who is not always a wise and just arbiter, finds out that he has made a mistake, and, because the extras are already large, does not write a formal order as required by the contract, but simply tells the contractor next day to do the work another way. The contractor claims an extra and the architect counters with the decision that the contractor has no redress because he proceeded in violation of Art. V, sec. D. The contractor claims he proceeded under Art. VI, sec. C. Who is right? This sounds impossible? Look at some of the legal decisions.

This contradiction is the poorest thing in the specification, and demonstrates "alibi" clauses perfectly. It's a good example of straddling.

10. Art. VII, sec. A. Why not allow the contractor to submit a list of sub-contractors whom he is asking to figure on the work. Then there will be no unpleasantness after the letting. The low sub, on whose figure the general has been awarded the contract, is sometimes *persona non grata* to the architect, with resulting complications. Such a situation always means a skimped job, for the contractor naturally makes up some how the difference between the figures of the approved and rejected subs.

11. Art. XI, sec. D. The phrasing is poor. It would be better if there was a period after "time" and a new sentence beginning "In such cases, etc."

12. Art. XIV, sec. E. I doubt if this clause has any legal value, because again the architect is attempting to avoid responsibility for his acts. It would be better to call upon the contractor to make good any defects of workmanship or materials for a certain definite time after the completion of the contract, and to bond him to do so.

13. Art. XVI, sec. A. This is a good statement of the "time" question. The sentence "he hereby agrees that such time limits are ample, etc." brings forcibly to the contractor the whole question of time, and gives him no alibi in case of failure to perform.

In this connection there should be incorporated in Sec. B—"Extensions"—a clause covering the failure of the architect to perform on time; the owner is covered, and also unforeseen conditions, but how about the dilatory architect who fails to provide details or make decisions on time?

14. Art. XVII, sec. C. Would not "Inferior" be a happier word than "Faulty"? How can an architect, in fairness to his reputation (and his employer) accept work he knows to be defective? And how can he justify his negligence in allowing faulty work to be done under his supervision?

Very truly yours,
(signed) John F. Gowen

THE DRY CELLAR BY OTTO GAERTNER

SPRINGS, too, are a nuisance often found in an excavation and the water from them must be properly taken care of. The manner of doing this must be studied out at the site as conditions may vary greatly. An excavation wholly or partly in rock may present peculiar problems. Such an excavation may be on the side of a hill and water from above may follow the top of the rock or the fissures in the rock, until it reaches the foundation. Then again it may be possible that other fissures will drain the water away from below the cellar floor or the top of the rock at the low side of the excavation may be deep enough to permit the water to drain away. Then again the excavation may be wholly in sound rock or impenetrable soil so that the water accumulates in the excavation and can not drain off. Then the building resembles a cup standing in a pan of water and its walls must be water-proofed if the water is not to penetrate. If the excavation is deep and without an outlet for the accumulating water, considerable pressure may be exerted to the surface of the walls and on the underside of the cellar floor, causing the water to enter the cellar rapidly. Although the space from the face of the cellar walls to the face of the excavation is backfilled, it must be remembered that such backfilling is relatively soft and porous so that surface water will accumulate in the space, saturating the backfill material and wetting the foundations.

It does not matter how wide this filled-in space is; it may only be a few inches. But it is the depth of the water filling this space that counts. The deeper the water or the more its level is above a certain part of the foundation wall, the more will be the pressure driving the water through that part.

There may be a pond, a lake, or a stream of water near the excavation and in that case the same difficulty may occur if the bottom of the excavation is below the level of the top surface of the water. Unless there is some natural or artificial barrier between the body of water and the excavation which will prevent it, the water will find its own level and rise in the excavation. A bank of clay or a ledge of solid rock may prevent it, especially if there is nothing to keep the water from draining off in another direction. Then again, if an outlet is provided to drain the water away from the building, the pressure will be relieved and the problem will become one of damp-proofing and not water-proofing; that is, if the outlet is low enough.

If the outlet is low enough it will even prevent the water from soaking through the floor by capillary attraction. There are several ways of specifying such an outlet. It may be a ditch filled with broken stone covered in such a way as to prevent the earth from washing into it and closing the voids between the stones. Such a ditch should be specified to extend around the outside of the foundation and be lower than the cellar floor. Better still, several cross trenches may be specified under the cellar floor, in addition, leading into the outer trenches. From the outer trenches there should be at least one such trench leading to lower ground so that the water accumulating in the trenches may be led off. Or the water may be lead to drywells or to other available places. Better still a line of agricultural clay tile pipe or, preferably, salt glazed vitrified tile sewer pipe with hubs may be specified to be laid into the bottoms of the trenches to drain off the water. This pipe should be specified to be laid with a slight fall or pitch and with open joints so that the water may find its way into the pipe and be led away as mentioned above. Some method should be specified for keeping the pipe from filling with earth or sand. Since the pipe is laid with open joints, that is, without cement mortar to hold the pipe together and make the joints tight, the hub jointed pipe should be used if possible.

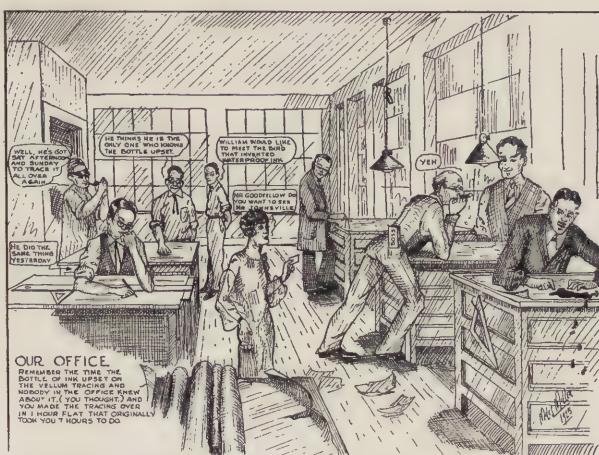
PENCIL POINTS

The hubs project over the ends of the adjacent pieces of pipe and prevent the earth from washing into it. Joints may also be protected by wrapping them with tarred paper or by covering them with straw. The space around the pipe should be filled with coarse broken stone or cinders through which the water may find its way to the pipe. To keep this stone from clogging with earth it should be covered with finer stones or cinders after which as an extra precaution it may be covered with a layer of straw.

The cellar walls may be of brick, stone, terra cotta blocks, concrete blocks, cinder concrete or stone concrete. The denser the material used the more impervious will be the wall. Therefore, brick, stone and stone concrete well rammed are the best materials to use. Brick should be hard and well burned, stone should not be porous, terra cotta should be hard and well burned and must be trowel plastered with at least three quarters of an inch of cement mortar on the inside and outside. The inside coat is sometimes unwisely omitted. Terra cotta should only be used for cellar walls in dry locations and only on solid concrete or other footings. Care must be taken not to over load it with too heavy a structure on top. The specifications should call for the cement mortar to consist of one part cement and three parts clean sand.

If concrete is used the stone or cinders should be clean and free from dirt. Well screened gravel is also used and is as good as stone for foundation work. Depending upon the conditions to be met with, a concrete consisting of one part cement, three parts of clean sand, and five parts of aggregate may be used. For heavy loads of water pressure one part less of sand and one less of aggregate are used. With cinders only two parts of sand are often specified. The aggregate should pass through a two inch ring and be retained by a three quarter inch diameter ring. Under favorable conditions, larger sized stone are thrown into the forms when placing the concrete. In such cases the stones should not be too large and care should be taken that they occur toward the center of the wall and that the concrete is well spaded around them. The larger the stones are the longer the unbroken joints between the stones and the concrete will be and the more easily water will be able to follow them through the walls. The ideal concrete mixture is the one in which the aggregate is so proportioned that the smaller particles solidly fill the voids between the larger ones, the sand being used to fill the smallest voids and the cement acting as a binder to cover each particle completely and hold the mass together. Tests may be made of the materials which are available in order to see what proportions of each must be specified in order to have the most dense mixture. In the same way as the broken stone in the trenches allows the water to pass through the voids the denser the mixture the more water will be kept from passing through the concrete, since it can not readily pass from one void to another. Care must be taken that the concrete is well rammed and that the forms are well filled, leaving no porous spaces.

(To be continued)



The above cartoon, entitled "In Our Office", was submitted by PENCIL POINTER Miles Miller of Dayton, Ohio. Unusually good eyes or a reading glass will be required to decipher the legend.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Pivoted Sash, Catalog 12-A.—Document containing many full page detail drawings, tables of standard sash units, data on wall design, specifications and much other useful information. 48 pp. 8½ x 11. David Lupton's Sons Co., Allegheny Ave. & Tulip St., Philadelphia, Pa.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen, Vol. 7 No. 10 of which contains a plate in full colors and gold reproducing a design by Mr. Leon V. Solon. Four more color plates and articles by Mr. Solon will appear in subsequent issues. Atlantic Terra Cotta Co., 350 Madison Avenue, New York City.

Portfolio of Mantel Designs.—Photographic reproductions of 20 mantels suitable for various uses. Post card size. Georgian Mantel Co., 15 East 40th St., New York City.

Five Construction Details—Factory and Area Floor Details, Roof Construction, Garage Floor Details, Hospital Floor Details and Urinal Stall Details. If you have not the complete set of details previously published they will be furnished on application. Josam Mfg. Co., 4900 Euclid Bldg., Cleveland, Ohio.

Architectural Terra Cotta.—Attractive brochure presenting illustrations of a variety of buildings of many types, together with 9 full page plates showing details of ornament and construction. 8½ x 11. Corning Terra Cotta Co., Corning, N. Y.

Reproductions of Early American Furniture.—Series of plates showing selected early American pieces faithfully reproduced in wood, manufacture and finish. These pieces are suitable for a wide variety of uses. Erskine-Danforth Corp., 2 W. 45th St., New York City.

Light.—New brochure showing a large number of pencil drawings of attractive lighting fixtures of many styles. Done in Sepia on heavy plate paper. 80 pp. $\frac{1}{2} \times 11$. Curtis Lighting, Inc., 1116 W. Jackson Blvd., Chicago, Ill.

Heat Insulation for Houses.—Specification document covering subject with technical data on heating losses and savings to be effected by proper insulation. Detailed drawings, treatment for bungalows and larger houses carefully set forth. 24 pp. $\frac{3}{4}$ x 11. Standard filing form. Flax-lij-num Insulating Co., St. Paul, Minn.

Sash Chain Specifications.—A.I.A. file No. 27 AL. Data and portfolio covering completely subject of sash chains. The Chain Products Co., Cleveland, Ohio.

Contractors Atlas.—Periodical issued in the interests of architects and builders. The June issue contains an article on swimming pools with drawings, principles of design and construction, etc. Atlas Portland Cement Co., 25 Broadway, New York City.

Distinctive Floors.—A.I.A. File No. 28 il. Set of five brochures with color reproductions of modern floor materials suitable for various uses. Bonded Floors Co., Inc., 1421 Chestnut St., Philadelphia, Pa.

Lodge Furniture.—Brochure dealing with furniture suitable for the lodge room and similar auditoriums. 24 pp. 8½ x 11. American Seating Co., 14 East Jackson Blvd., Cleveland, Ohio.

Marbleloid—**the Universal Flooring.**—Illustrated booklet covering subject of modern flooring in various types of buildings and for many uses. Industrial plants, restaurants, schools, hospitals, sales rooms, churches, theatres are covered. 24 pp. $8\frac{1}{2} \times 11$. The Marbleloid Co., 461 8th Ave., New York City.

Lubricators for Elevator Guide Rails.—Bulletin describing modern equipment to cover this important phase of elevator operation. Elevator Supplies Co., 1515 Willow Avenue, Hoboken, N. J.

Colored Concrete Buildings.—Treatise on the subject by Hazel H. Adler. Lehigh Portland Cement Co., Allentown, Pa.

Bingo of Flathead.—A story done with pen and ink illustrations. Western Pine Mfrs. Assn., 510 Yeon Bldg. Portland, Ore.

Boilers and Tanks.—Catalog B covers all types of tanks for hot and cold water, pantry sinks and other similar work required in residences, club houses, etc. 36 pp. 6 x 9. John Tragesser Steam Copper Works, 448 West 26th St. New York City.

Roofing Facts and Figures.—Booklet with samples of Canvas roofing. A material suitable for many uses in modern residence work. William L. Barrell Co., 93 Worth St., New York City.

The Evanston Sound-Proof Door.—Data sheets covering sound-proof doors, folding partitions and other similar equipment. Standard filing size. Irving Hamlin 1822 Sherman Ave., Evanston, Ill.

PENCIL POINTS

VOLUME VI

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NUMBER 8

THE DRAFTSMAN'S PRESENT-DAY OPPORTUNITY

IT IS easy to look back six months or a year and see very clearly where we have made mistakes, or have failed to make the most of opportunities that were present at that time. It is not always so easy to size up the situation existing at any given moment and do, right then, those things which will contribute most to our future well-being and prosperity.

The entire building industry of the United States is extremely active and prosperous. Architects' offices in most sections are handling a large volume of work; employment is at the highest point we have ever known it to be at the best average wages. No competent draftsman today need be out of employment.

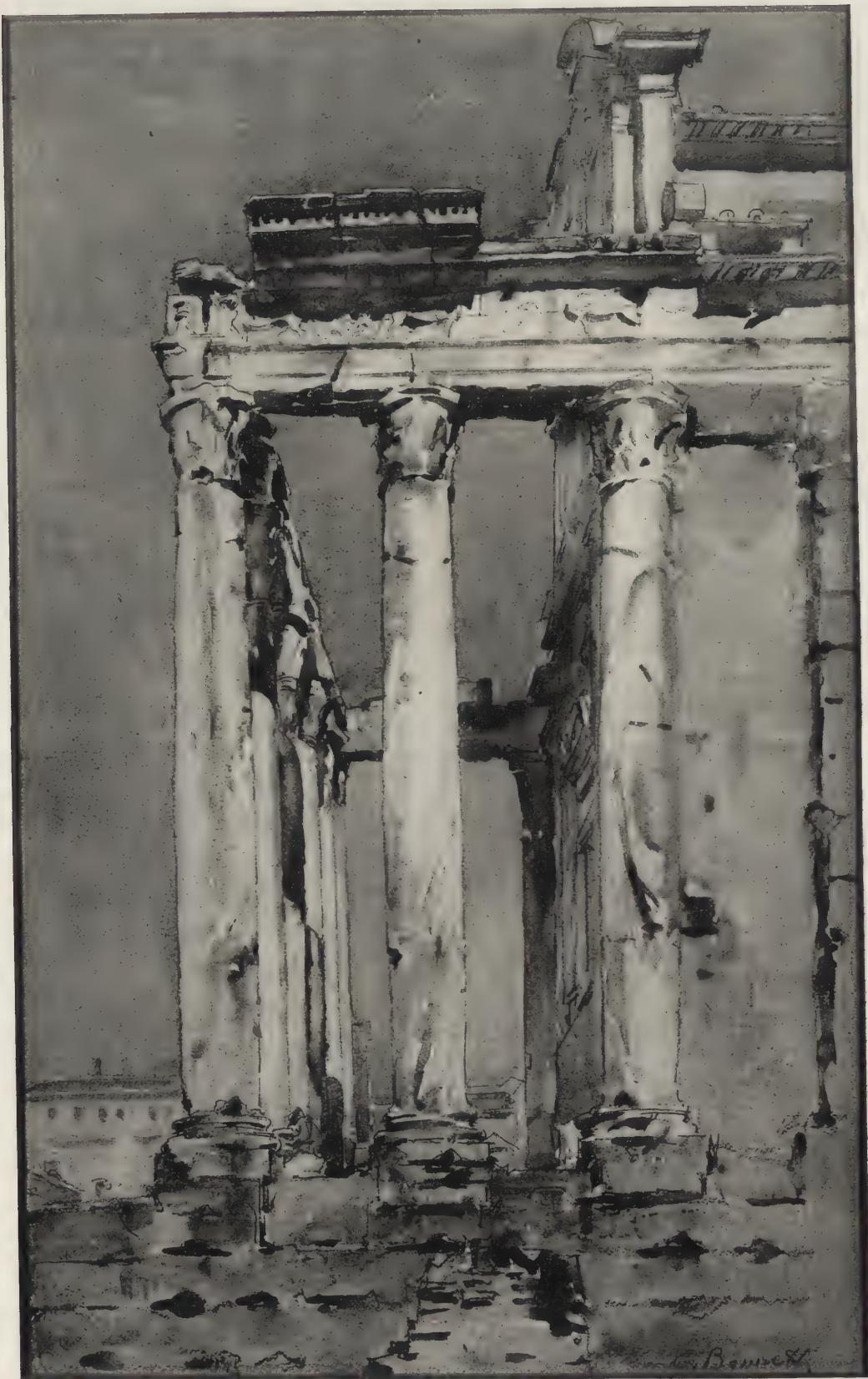
It is human nature, nothing more or less, to take the future for granted when the present is highly satisfactory. Without in the least sounding a note either of pessimism or warning, we would bring it home to the drafting fraternity generally that things may not always be quite so rushed and rosy as they are at the moment, and suggest to each man to take a little peek ahead and adopt a definite program calculated to improve his position with respect to the profession of which he is a factor and insure to himself, so far as may be possible, continued satisfactory employment.

The one true answer is constant self-improvement. We do not mean by this that every man, even in the practice of architecture, gets just exactly what is coming to him. In some cases this is lucky. But taking it by and large, the man who is really delivering the goods has much less to worry about than the other fellow when work slackens up a little bit and somebody is being laid off. Many architects' organizations are being expanded to take care of the jobs offering. This process, we believe, will be continued for at least a year—maybe longer. When associates are being taken into firms the principals very naturally offer the first opportunities to the men whom they regard as indispensable, the men they could not afford to lose. We are sometimes told that in certain offices promotion is not made according to merit, but that "pull" is the deciding factor. But we also notice that the man who is advanced usually has something which justifies his choice for greater responsibility. He may not be a better draftsman than his fellows; but maybe he shows sound judgment, is successful in his contacts with clients and contractors, has an agreeable personality, is a good executive, is reliable and dependable and lives within his means. Another man who feels that he has been discriminated against when the promotions are handed out may be a bet-

ter draftsman than the one who is preferred but may fall down in one or more of the other qualifications, all of which have a bearing on the matter.

The great present-day opportunity of the draftsman, as we see it, is three-fold, or rather branches three ways, and these should all be carefully studied with the circumstances, qualifications and ambitions of each individual mind. Some men contemplate opening offices of their own and to such, if they are qualified, we recommend that now is the time to consider this move. Others may have as their ultimate goal an association or partnership with the firm with which they are now connected. To them we recommend the most careful application to their work, never missing an opportunity to advance the interests of their firm in every possible way. Still others of the drafting room force who, because they are not good business getters or executives, may never consider it advisable or possible to start for themselves should, nevertheless, take full advantage of the present opportunity to develop their talents so that they may become increasingly valuable to their present employers or to someone else. We notice a tendency on the part of many men to let down in the matter of study in good times. No man who takes himself seriously can afford to do this. And no man can go far in our profession, or in any other, unless he does take himself seriously. The architectural magazines, all of them, should be carefully read and read regularly. The few hours each month necessary to digest these publications carefully should be laid aside as a primary duty. Good books, which can be found either in the architect's library or in the Public Library, should be studied. It is a mistake for any ambitious man to permit himself to get into a rut. Possibly his present duties are more or less circumscribed. If that is the case, and in these days of specialization it is frequently the case, a man should make an extra effort to keep up with those branches with which he does not come in contact as a part of his job, but a full knowledge of which is so essential in equipping an individual to grasp a larger opportunity, which may be offered to him tomorrow or three months hence.

Maybe this sounds like a sermon, and maybe it is, but if so it is a sermon taken from the book of experience. We have been watching the things of which we are writing for a good many years. We have seen successes and failures—and those in between. Success, in a majority of cases, comes to the clear-thinking man who analyzes his problem, sizes up his abilities and limitations and strives for a definite goal.



*Water Color Drawing by Edward H. Bennett. Roman Forum—
Temple of Antoninus and Faustina.*

MASTER DRAFTSMEN, XIV

EDWARD H. BENNETT

EDWARD H. BENNETT was born in a country where the English language is spoken and, being burdened with an English private school and technical college training, was brought into these United States and became a citizen before the "quota" was invented or the language of the Port of New York had gone so far towards becoming that recorded as having been inflicted, originally, upon the workers on the Tower of Babel. Under the examinations now held in those tongues, he might still have been a "furriner." Whether the circumstance was fortunate for him, or only for those of our citizens who welcome into this country every trained mind and energetic worker with artistic capabilities, would seem to be answered by his distinguished success as a consulting architect specializing in city planning.

His father had intended that young Bennett should become a rancher and took him to California; but his own inclinations led him to take up drawing at night and spend a great deal of time sketching in water-colors around San Francisco Bay. He worked for some time in architects' offices in the metropolis of the coast, and fell in with a coterie of young students who met at the home of Mr. Bernard R. Maybeck, a Beaux-Arts trained architect (whose admirable work, by the way, is not as well known as it should be), who instructed an informal class at his home in Berkeley, and whose influence caused young Bennett to decide to aim for a Paris training.

Bennett went to Paris about 1895, passed the examinations for entrance to the *Ecole des Beaux-Arts* and followed its courses until 1902, when he received the diploma of the French Government.

During the period of the course at the *Ecole*, he spent some time in England in architects' offices, made a number of tours in France and in Italy, and finally a trip to Greece and Turkey. The drawings of the porches of Chartres Cathedral, reproduced on page 50, were prepared partly for the archaeological course in the *Ecole des Beaux Arts* and partly for the Pugin scholarship of the Royal Institute of

British Architects. He received a medal in the competition for this scholarship. He made also a number of color renderings of enamels, mosaics, etc., in competition for the Owen Jones scholarship of the R. I. B. A., which he won in 1901.

In the late 90's, Mr. Bennett became convinced that he had devoted too much time to water coloring and practically abandoned that work, as well as color rendering, and concentrated on architectural composition,—line and mass. Looking back, he says he cannot but be struck by the great necessity for wise general counsel in a young man's course of study and that an architect's study in color should be pointed not toward the pictorial, but in the direction of decoration and decorative values of building materials and the production of fine effects. It would be better, he thinks, to record this information mostly in rendered drawings. His observations are parallel with those of other men, who, having made a remarkable success of a given kind of work, feel that they might better have employed their time at something else. It was his water color sketching that led him to the study of the decorative value of color and to a great deal of his early success as a student.

When he returned to the United States, he worked for a time for Mr. George B. Post, being put up hospitably by Joseph Howland Hunt. Warm ties were formed in New York and the associations made in the office of Colonel Post and his sons, William and Otis, were left regretfully to join the powerful Burnham in Chicago. This came about largely by contact formed with Peirce Anderson, an intimate friend during the days at the *Ecole*, who had become designer with D. H. Burnham.

Bennett was first employed to take charge of the Burnham design in the West Point competition, after which he returned to New York, only to be again invited to Chicago to study the playground parks for the South Park system in Chicago with Mr. Burnham. He then became assistant to Mr. Burnham on the plan for the City of San Francisco
(Continued on Page 49)



Edward H. Bennett.

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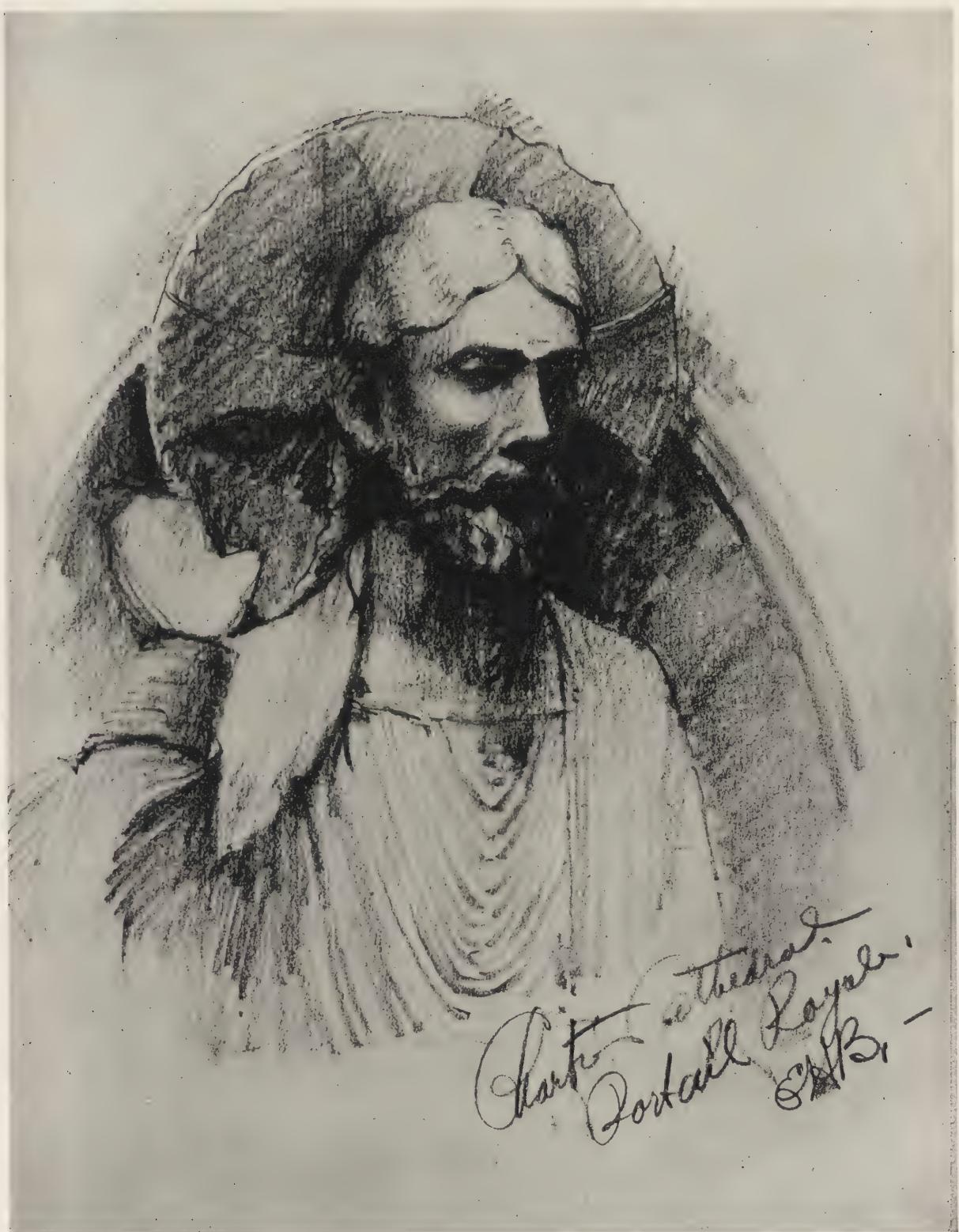
Water Color Drawing by Edward H. Bennett. Chartres Cathedral—North Portal.

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*Water Color Drawing by Edward H. Bennett. Chartres Cath'dral—
Royal, or West, Portal (Center Door).*

PENCIL POINTS



Drawing by Edward H. Bennett. Chartres Cathedral—Detail of the Royal, or West, Portal.

PENCIL POINTS



*Water Color Drawing by Edward H. Bennett. Chartres Cathedral—
Detail of Royal, or West, Portal.*

PENCIL POINTS



Drawing by Edward H. Bennett. Chartres Cathedral—
Detail of Royal, or West, Portal.

PENCIL POINTS



Drawing by Edward H. Bennett.
Chartres Cathedral, Detail of Royal Portal.

(Continued from Page 43)

and finally, as associate with Mr. Burnham, on the plan of Chicago in 1906-1908. Since the completion of the great plan for Chicago, Mr. Bennett has devoted his time to the practice of city planning and has developed plans for many of the larger cities of the United States, and one, at least, (Ottawa) in Canada. They have all been designed on definitely architectural city planning lines, with the conviction that the great force and influence of the Burnham-McKim-Olmsted plan of Washington and the plans of San Francisco and Chicago lay in their architectural composition and design. A conviction founded on incontestable fact, and, it may be added, understood by the layman only through the effective presentation of the architects' ideas by means of their especial conventions, rendered plans and perspectives. By such means the American public has come rapidly to the understanding of city planning as the legitimate field of the designer with an architectural, rather than an engineering, training. The essential difference in the fitness of the professions, lies in the fact that architects are trained to plan in a broad, general, and monumental sense, while engineering training is rather in the details of the services of the plan.

The branch of architectural work known as "city planning," but including in its details any grouping of structures and open places (parks, boulevards, arrangement of streets, etc.) on lines of beauty with due consideration of physical, social and economic conditions, is now engaging the principal attention of many of the more advanced and best-trained architects throughout the world.

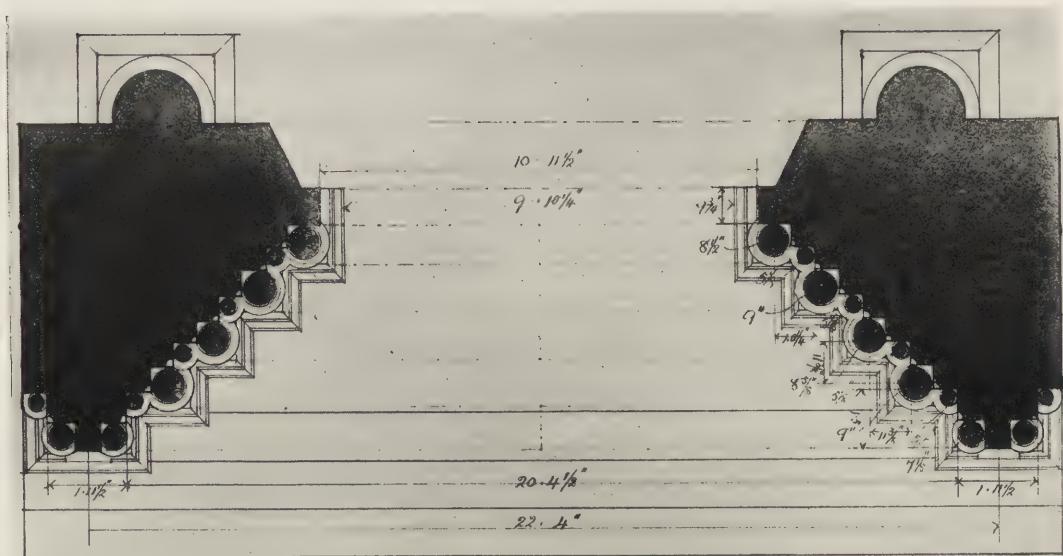
The attendance at the recent National Conference on City Planning included a hardly less distinguished body of planners than the convention of the American Institute of Architects. That the gatherings were held in New York at the same time doubtless added to the attractiveness of each. At the exhibitions of the Architectural League of New York and of the T-Square Club of Philadelphia an unusual number of city improvement plans were shown, while the architectural character and interest of the designs made many problems in city development clear to laymen to whom all engineering designs are "Greek". The exhibits of maps produced by aerial photography produced surprise in many amateurs by reason of their remarkable resemblance to the *Beaux-Arts* type of rendered plans. A comparison of a French drawing made in accordance with the conventions of the *Ecole* could be distinguished only by close examination from an aerial photograph of the same group of buildings. By means of the photograph public interest has been drawn to the meanings of the conventions of architectural drawings of plans: just as the ordinary snap-shot has made known to the general public the difference between the "English" and "Colonial" styles of residential architecture. It has not gone far yet, in either direction, but the roots have taken hold and the plants will flourish. The field of opportunity for the architect of ideas to

(Cont. on Page 56)

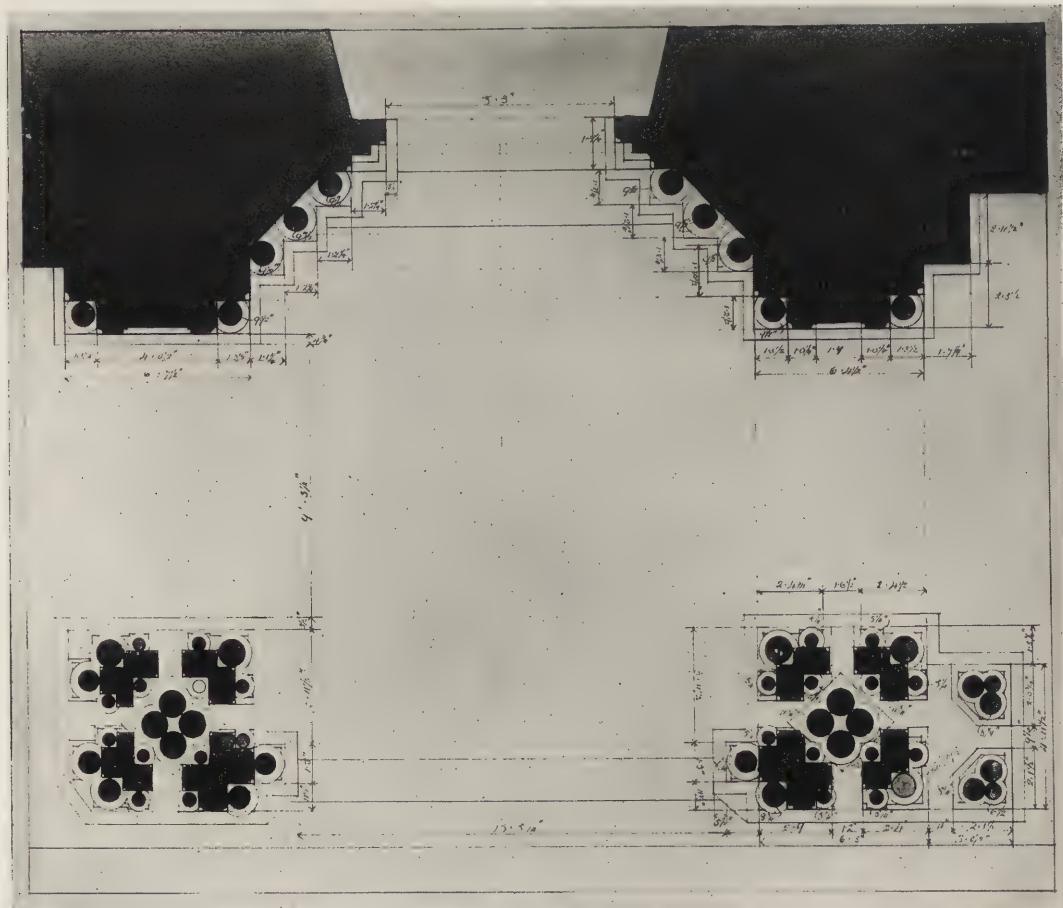


Drawing by Edward H. Bennett. Detail of Chartres Cathedral.

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Plan of West Porch.



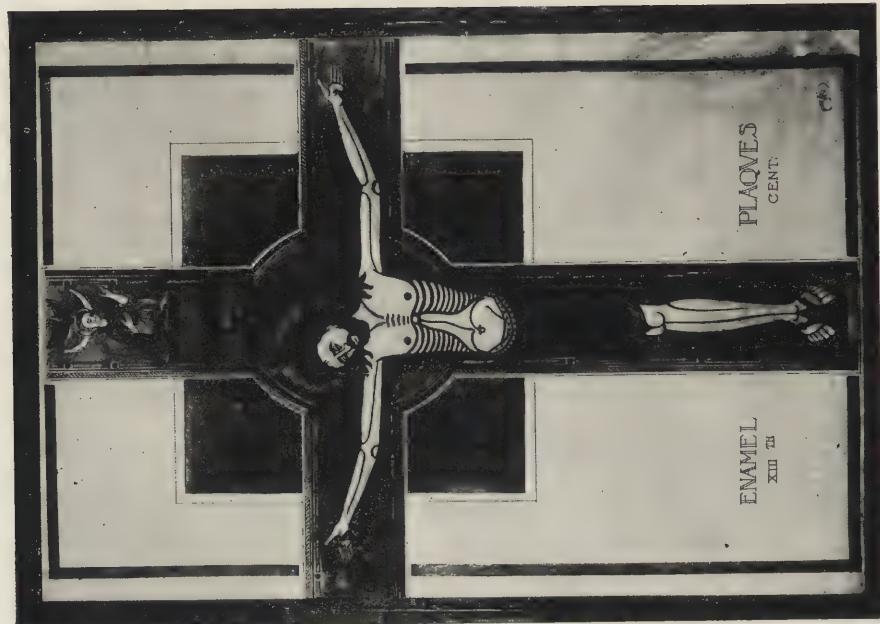
*Plan of North Porch.
Drawings by Edward H. Bennett. Chartres Cathedral.*

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Water Color Drawing by Edward H. Bennett. Dome of Val de Grâce Church.

Water Color Rendering by Edward H. Bennett.



*Sketch by Edward H. Bennett.
Detail, Chartres Cathedral.*

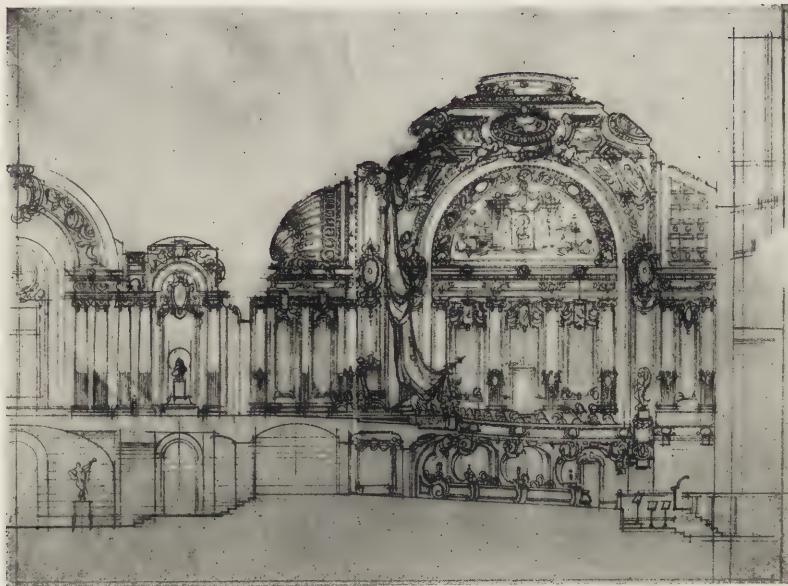


Water Color Renderings by Edward H. Bennett. Enamel Plaques.



Entrance to Cathedral at Pisa.
Water Color Drawings by Edward H. Bennett.



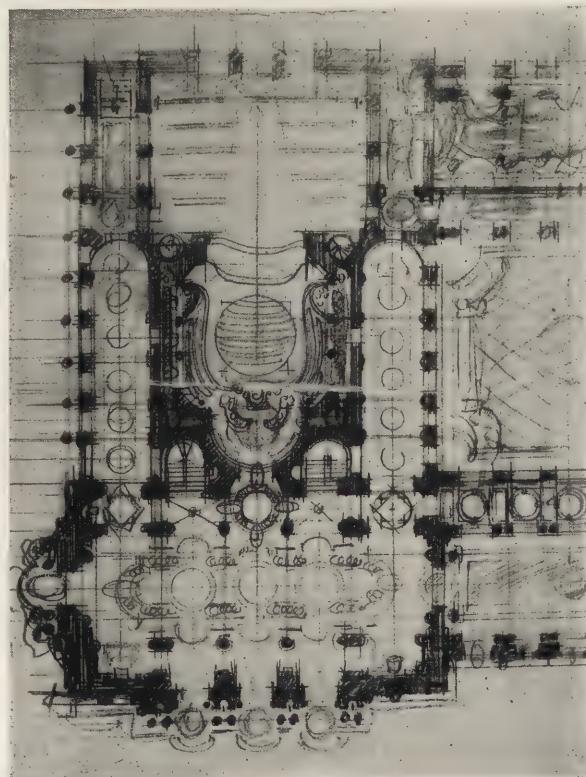


Sketch of Section for Projet, "Theatre in a Palace," Ecole des Beaux Arts.



*"A Royal Box," Twelve-hour Esquisse,
Ecole des Beaux Arts.*

Drawings by Edward H. Bennett.



*Sketch Plan for Projet, "Theatre in a Palace,"
Ecole des Beaux Arts.*

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(Continued from Page 49)

utilize all that he has of imagination, training and skill in the presentation and production of those ideas has broadened again into another field of its own estate—so long held at such great cost to the public by the city and state “engineers.” Yet observations and records prove that wherever a city has developed in the beautiful, orderly and efficient sense it has been due to architectural planning.

It is, perhaps, doubly interesting that a leader in such planning should have commenced his training as a water-colorist and gone on from that stage to a student of decoration before finally directing his attention to the planning which involves “heavy engineering”.

Upon the point this observation brings up—the question of whether engineering or artistic training best fits a man for the big problems in life—I am reminded of the assertions made by the late Sir William Van Horne (builder and former president and chairman of the Canadian Pacific) in discussing the building of a great pulp and paper plant and railway. He said that he “would rather have

one Stanford White than a dozen such chief engineers as *so-and-so*, because the artist sees any part of the earth’s surface as a plane with a bump in it that is easy to get around or through, while the engineer sees bumps in every vacant lot that are insurmountable difficulties to him.”

Mr. Bennett has been consultant on city planning to the Chicago Plan Commission since 1909, involving direction of design of the public improvements projected and carried to execution. These include: the Michigan Avenue project, architectural approaches and bridge, bridge houses, and abutments; South Water Street double level river embankment project; Ogden Avenue; and the great Railway Terminal projects that concern the city development; and numerous bridges, also the entire Lake Front project.

He planned military training camps of Camp Grant, Rockford, Ill., and Camp Knox, Stithton, Ky., after the entry of the United States into the World War. He also organized and is a member of the firm of Bennett, Parsons and Frost, city planners, Chicago.

FRANCIS S. SWALES.



*Drawing by Edward H. Bennett. Entrance to
Orangerie, Twelve-hour Esquisse,
Ecole des Beaux Arts.*

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PLATE XXIX



LITHOGRAPH BY JOHN RICHARD ROWE
PROVINS.

On the other side of this sheet is reproduced one of many interesting lithographs made by John Richard Rowe as a result of his travels abroad. This, like the lithographs by Mr. Rowe which have been published in PENCIL POINTS from time to time during the past year or so, shows an excellent technique and an unusually good appreciation of the character of the architectural subject rendered. Mr. Rowe has been a student at the Ecole des Beaux Arts in Paris, in the Atelier Gromort and in the Atelier Laloux. He exhibited in the Autumn Salon in Paris, 1922, and at various art galleries in this country, including the Toledo Art Gallery and the Albright Art Gallery in Buffalo.

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PLATE XXX



Courtesy of Kennedy & Co.

PASTEL BY TROY KINNEY
"THE WARRIOR DANCE," LAURENT NOVIKOFF.

An action study that is of great value to the student in addition to being a good picture is the pastel, "The Warrior Dance," reproduced on the other side of this sheet. Here, Laurent Novikoff, the famous Russian dancer, is shown in a movement of one of the barbaric dances that form so important a feature of the work of the Ballet Russe. The action has been recorded with remarkable skill. This is due very largely to Mr. Kinney's practice of making many rapid sketches of a single subject in progressive stages of the movement so that when he draws a pastel or makes an etching his knowledge of the complete movement enables him to give an extraordinary degree of life to the action. It is interesting to note that in making this kind of a sketch Mr. Kinney frequently sits among the audience and draws on a small pad of paper lighted with a little electric flash light shaded by his hand.

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PLATE XXXI



DRAWING BY WALTER B. CHAMBERS
MT. ST. MICHEL.

The sketch reproduced on the other side of this sheet is one of the large number of sketches made by Walter B. Chambers on one of his early trips to Europe. It shows an unusual delicacy of treatment and command of technique. Other sketches by Mr. Chambers have appeared in earlier issues of PENCIL POINTS and we have been so fortunate as to secure several others which will appear in future issues.

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PLATE XXXII



DRAWING BY OTTO F. LANGMANN
THE OELRICH'S HOUSE, NEW YORK.

The drawing of the Oelrichs House, Fifth Avenue, New York, by Otto F. Langmann, reproduced on the other side of this sheet, has an unusually attractive tonal quality due to the fact that it is drawn on a Chinese paper of silky fibrous texture and rich buff color. The work in soft velvety black pencil strokes has an ease and freedom in keeping with the character of the paper.

A Six Room Suburban House

REPORT OF THE JURY OF AWARD OF THE NINTH ANNUAL COMPETITION CONDUCTED BY
THE WHITE PINE SERIES OF ARCHITECTURAL MONOGRAPHS

RUSSELL F. WHITEHEAD, PROFESSIONAL ADVISER

Judged at Yama Farms, Napanoch, New York, June 13, 14 and 15, 1925.

PROBLEM: Mandatory. The design of a useful, substantial and attractive six-room suburban house, not over 24,000 cubic feet in size, to be built of wood. The site is a rectangular lot with a frontage on the highway of fifty feet (50 ft.) and a depth of one hundred and fifty feet (150 ft.) with level grades. The highway runs east and west. It is assumed that the adjacent lots are of similar dimensions and that the local restriction provides that no house shall be erected nearer than 30 feet from the highway property line and that no building may be placed directly on either the east or west lot line.

The house is for a small family in moderate circumstances where the expenditure of every dollar is to be most carefully considered, and is to be administered without servants. It shall contain a living room, dining room, kitchen, two-fixture lavatory, three bedrooms, one bathroom, entrance into hall, vestibule or living room and a separate service entry. There shall be one closet for each bedroom, a linen closet and a coat closet. No bedroom can be smaller than 90 square feet in area. A cellar is required. If design provides space for room in attic, stairway shall be shown. The design shall provide one open fire place and a porch or porches.

The architectural style is optional, originality and variation of treatment from the traditional, which is sound architecture and shows a proper regard for the qualities of a wood-built house will be welcomed. The designer may select any section of the United States for the location of the house. The territory chosen shall be plainly marked on the drawings.

Due consideration should be given to the lengths and widths of lumber used for floor joists, studs and siding with a realization of those points where the price increases out of due proportion with the increased length and width required. A similar knowledge in regard to standard sizes of doors, windows and glass areas.

COMPUTATION OF CUBIC CONTENTS: Measurements must be taken from the outside face of exterior walls and from the level of the cellar floor in all parts excavated or from the bottom of floor beams in any unexcavated portion to the average height of all roofs. "Average" shall mean a point at half the distance from the top of the wall plate to the top of the ridge. Open porches are to be figured at one-fourth their total gross cubage if they project beyond the main bearing walls, the height to be measured from the finished grade. One-story wings or bays or enclosed sleeping porches two stories high shall be figured at their actual cubage, measurements taken as stated above.

All cubage figures will be carefully checked by a representative of Mr. Whitehead before designs are submitted to the Jury. Designs exceeding 24,000 cubic feet will not be considered.

THE nearly three hundred drawings received in *The White Pine Series* Competition for a Six Room Suburban House presented a number of interesting and somewhat unusual problems to the members comprising the Jury of Award, when they met to judge the competition on June 13, 14 and 15, 1925, at the invitation of the Professional Adviser.

In the first place, the Jury felt that the increase in the amount of the awards offered for this competition rendered it especially desirable that the most careful consideration be given, not only to the designs submitted, but also to the requirements of the competition program, and the extent to which the competitors had studied and perfected their designs in accordance with a fair interpretation of these requirements,—and especially in their undertaking to select the first prize of \$1,000 did the Jury painstakingly analyze the best of the designs submitted in their endeavor fairly to award this considerable prize.

As usual in any competition of this sort, it was not difficult to reduce the competitors from about 150 to practically a third of that number. These 50 or more plans then received more careful scrutiny,—and, after some consideration, about half were again eliminated, and the major part of the Jury's time thereafter was taken up with a consideration of those that remained. It should in all fairness be stated, however, that before making the final awards, the Jury several times went over the plans that had been previously discarded; the entire group was looked over a second time and a few designs taken out for more careful study and analysis with those that had received previously most serious consideration; while the group of approximately 50 just referred to, was gone through not once but several times by the Jury as a whole, and several other times by individuals of the Jury, in an endeavor to discover any meritorious plans that might perhaps have been overlooked.

Even after the Jury had winnowed out the best dozen or fifteen designs, from among which they were fairly well assured they would award not only the prizes but most of the mention designs, the next larger group of 25 or more designs was again gone through, and one or two drawings taken from it to receive final consideration by the Jury in the selection of the prize and honorable mention designs.

When first the competition group was studied, the Jury endeavored to meet upon a tentative set of prize designs; in the endeavor not only to establish a standard of gradation, based upon the solutions brought forth by this competition, but also to assist themselves in arriving at a common agreement in regard to the best type of solution of the problem set by the program. A considerable variety of opinion within the Jury immediately developed.

As it happened, one or two of the Jury at first felt that this competition had not brought forth any one design that was obviously superior to all of its competitors. In a number of cases it was possible unanimously to agree that a certain competitor had achieved an unusually successful and compact plan, or another had developed an undoubtedly interesting and workable elevation; but it did not at first appear that any of the designs which attracted attention, either from superior plan arrangement or architectural treatment, had been completely developed by the competitor to a point where, from both points of view, his design was undoubtedly of the first place. At one period of the discussion it almost began to appear that the Jury felt disinclined to award any one design the first prize; while at the same time it became apparent that, with a first prize design once accepted by them, the second, third and fourth prizes might easily be agreed upon.

The result of this threatened impasse was to send the Jury once more to a study of the entire group of plans submitted, and cause them to make—for their own consideration in awarding judgment—a new and stricter analysis of the competition program. The result of that analysis brought out, as it seemed to the Jury, inevitably and logically a first prize design; upon which they shortly came to unanimous agreement, and which they hope all those who have made a careful study of the competition program—whether or not they finally submitted drawings—will, after mature consideration, also be willing to accept as best worthy of that position.

To summarize, the program stipulates that consideration be given to the following points, in the order named: First, excellence and ingenuity of the plan; second, the architectural merit of the design and its fitness in expressing the material—wood—of which the house was to be built; third, the practicability of its construction; and fourth, the appropriateness of the design to the given site.

Of these four the first two are obviously of major importance. The appropriateness of the design to the site was evidently a consideration not thoroughly understood by most of the designers,—and at first sight may not appear of great importance to the result. If the reader of the program interpreted this merely to refer to the natural requirements of the site, it had not much importance; because the lot was there described as level, without any markedly unusual physical characteristics, and all the competitors were allowed by the program to select between the alternatives of facing the house upon either the south or north side of the street. It was interesting to note that by far the greater majority chose to face their house to the north rather than to the south. The important, and perhaps not at first ob-

PENCIL POINTS

vious, meaning of this stipulation, was contained in the human factor which had chosen to develop this naturally rolling and nearly level plot into lots so narrow in width as 50 feet each,—and this was the stipulation which a great many of the competitors failed to take into consideration. It was also, as it happened that factor which was most important in the selection of the design awarded the first prize!

So far as practicability of constructions was concerned, most of the competitors met this requirement by showing, in some small section of the detail portion of their dwelling design, a delineation of the manner in which the structure and ornament were sectioned and put together—using the customary widths and sizes common in the building trade, in the employment of wood. But back of this simple requirement there was also another factor which many of the contestants failed fully in realizing; and this, too, was a factor of some importance in the final critical analysis of these house designs. There were certain of the designs, for instance, where wood quoins had been employed,—without serious thought apparently upon the part of those familiar with New England colonial precedent—that these details were, because of their stone derivation, of doubtful desirability in a house required to be designed for and built of wood. It must at the least be acknowledged that they introduced an element of certain and unnecessary expense which it was indicated by the program it was desirable to avoid whenever possible.

A number of the other designs also could not be successfully carried out without the introduction of expensive and sometimes undesirable elements,—such as the use of a large deck in the roof. Others required the employment of elaborate pilasters or columns, or in some other particular perhaps demanded considerable expenditure along the line of expensive detail, which—while acceptable, and found in a greater majority of our later colonial work—would today nevertheless impose a considerable expense in the matter of labor, and perhaps unusual thickness of material,—whereas these factors were not of any great economic importance, under the conditions existing at the time the original models from which these houses were designed had been built. There exists in Wiscasset, for instance, a beautiful colonial staircase that, according to local legend, required one thousand working days for its construction,—which, with labor obtainable—as it then was—at the rate of a dollar a day, would place such an element of design upon an entirely different basis than today, when such skilled labor as it would now require would cost nearer ten to twelve dollars the day!

Even for the consideration of the plans upon the first two points stipulated in the program, however, it became necessary for the Jury to establish for its own guidance a quite definite understanding of the factors controlling the problem. They might be briefly enumerated as follows:—while the program allows two alternatives, either the northern or southern frontage for the house, in a solution of the problem; the Jury unanimously agreed that a house with a northern frontage should be given preference—for the reason that a house built within 30 feet of a street, which might, in the uncertain development of our American communities, easily become a main travelled thoroughfare, a set back of only 30 feet was not sufficient to give to the occupants of the house any privacy; or, indeed, any important use of the front 30 feet of the lot area. This meant that the portion of land at the back of the house would become of greater useable value to the actual occupants of such a dwelling; and consequently it would follow that the development of this property itself should be carefully thought out with regard to the details of arrangement of the plan; and the additional fact that the rear of the house would enjoy the southern frontage, with its valuable winter sunlight, required that every endeavor be made by the designer working on this alternative arrangement to take full advantage of this point in the disposition of his window fenestration; as this rear, or southern facade, would naturally become the living side of the house.

It was further agreed that, where the program had so expressly set the limitations of such a very narrow lot as part of the competition schedule, it was unfair not to maintain this requirement while judging at least the design to be selected as the "best" solution of the problem. It is a fact, of course, that a great many of the competitors chose to forget this important detail,—or perhaps merely assumed that the owner of the house would naturally become the purchaser of two lots rather than one; or that, because of his neighbor's not building, he would enjoy the benefit of their property,—but if such had been the intention in establishing

the requirements of the program, would not the competitors have been dealing with the problem of a corner lot rather than an inside lot in the block? A corner lot would also be more expensive, and very probably outside the financial resources of a prospective house owner who is forced to limit his desires to the least expensive type of dwelling that was indicated as being in mind throughout this entire program. Consequently, he would probably also be unable to indulge in the comparative luxury of purchasing two lots, if it would be possible for him to obtain a convenient and possible livable dwelling upon a single lot!

Therefore the Jury forced themselves to regard the limitation to the 50 foot lot as of prime importance in selecting the best solution of the problem they were considering. Following out this line of reasoning it next became obvious that, with similar types of buildings on the two neighboring lots; a plan of only 30 feet in width, making no more use than was absolutely essential of the two east and west elevations—practically only for air or sunshine—would make a more convenient and comfortable dwelling than a house crowding closer upon the lot lines,—and therefore closer to the next neighboring dwellings—and depending to any great extent upon the outlook upon either side.

For instance, even a 30 foot house, placed upon a 50 foot lot, would be no more than 20 feet away from its neighbors upon both sides. This 10 foot set-back from the lot line is, as a matter of fact, often a provision of the town building law in many communities. Even if the builder of a house was allowed to put his structure within 5 feet of his side lot line, it is probable he would keep the dwelling toward the eastern part of his lot in order to secure greater space and outlook along the west,—and it is probable that his neighbors would then also follow that same procedure. Thus the houses would again be separated by no more than 20 feet—providing they were all of but 30 foot width. If the builders, however, took advantage of this 5 foot side restriction to increase the width of their structure to the 40 foot wide dwelling that was thus allowable, their neighbors would probably do likewise; and in that event *all* the occupants would be suffering from the results of narrowing the space between the houses to a total of only ten feet,—which would seriously impair the privileges of sunlight and outlook for all dwellers in the community.

This line of reasoning brings us inevitably to the conclusion that the house depending least upon side outlook; most self-contained upon its own lot, must inevitably in the long run remain the most satisfactory type of dwelling in a closely built-up rural or suburban community of the type we are forced to consider. Even if, at the time his house is built, adjoining lots were undeveloped,—and the owner was thus led to make use of this portion of his neighbors property; or depended upon it for important outlook, light or air, he would but find himself additionally handicapped when, in the course of development of any growing American community, these adjoining lots came to be built upon and he would therefore necessarily lose his former privileges. A porch at the side of the dwelling, for instance, might have its air and outlook entirely cut off, whereas a porch faced at the rear and limited to the middle portion of the house would be in a position to be the least affected. The planting along the lot lines—which was the type of development indicated in most of the drawings submitted—would also tend to concentrate the owner's outlook on the south or north—as the case may be. Merely in the normal enjoyment of the major portion of his lot, with this accompanying sunlight, he would come most to depend upon the rear or southern part of his property; leaving the street frontage, with its possible undesirable noise and dust, and decreased sun exposure in winter—the less occupied or less used portion of his property.

After some argument, the judges came to entire agreement upon this as the best type of solution for the problem; and set themselves to find, from among the designs submitted, that one which best took advantage of the limitations thus prescribed. By this means did they finally come to unanimous agreement upon the drawings to be awarded the first prize; and any other analysis of the plans, along the lines indicated, they believe would substantiate their judgment in making this their selection. To give as much of advantage as was possible to that group of the competitors who faced their houses to the south upon the street, the second prize was given to a design utilizing this alternative orientation.

Before coming down to a consideration of the drawings in detail, however, it is perhaps desirable to make certain

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general criticisms upon the drawings as a whole. While many—in fact, most—of the designs, maintained a high standard of excellence (the present competition being, in the opinion of those who have had the opportunity of keeping track of these competitions for several years, a marked advance in general upon previous efforts) it nevertheless soon developed that a marked lack of originality in design was in evidence in the drawings that the Jury were considering. Many of the competitors had adopted, as the basis of their designs, commonplace or conventional solutions—whereas it was the intention of those connected with these competitions to endeavor to obtain a higher standard of design than it is usual to find in the ordinary type of American suburban or rural development.

Many of the contestants had looked no higher than the average type of house they could find about them. Others had gone back to the colonial cottage for the inspiration of their architectural expression of the plan; and again, in this group, a lack of real understanding of the originals of our colonial architecture developed; and the designers of this type seemed mostly to obtain a commonplace conventionality of classical expression. It was indeed noticeable of this small house competition,—far more than is usually the case—that many designs, afterwards discovered as having been submitted by western or middle western contestants, had been based quite closely upon the study of the later architecture of our eastern colonies,—and in fact, no indication of any local regional grading of the designs was to be discovered by the Jurors. Doubtless this was because of the required use of the material, in many instances,—but certainly it is possible to find solutions of the wooden dwelling, developed from other types of wood construction than those chosen by most of these competitors! Indeed, our own earliest types of dwelling in this country were themselves immediately derived from a quite different style of English cottage of the Tudor period—usually entitled “half timber” construction.

The Jury soon found themselves entirely in agreement upon a factor which has unfortunately, in the past too often influenced the results of competitions, in this country as well as abroad. Whereas, in the preliminary sorting of the designs, it was inevitable that one should be immediately attracted by a pleasingly composed and cleverly drawn perspective; yet it was found, in the closer study of the designs that was later undertaken, that these well presented exteriors had a constant tendency to move down the list in their placing; either through some real weakness of plan development, or as a closer study of the elevation brought out a better appreciation of the true merit of the house-design itself, quite aside from the engagingly appealing quality of the perspective's scenic background in which the house had been located by the competitor—often at a total disregard of the narrow limitations required by the 50 foot lot stipulated in the program.

The Jurors were also unanimous in agreement that architecture is a process of constructional building, not a mere matter of draftsmanship or cleverness in drawing; and it was their endeavor to judge of the appearance of these houses entirely upon the basis of how they would show up if built in wood, along the lines proposed by the contestants in any group of American suburban or more rurally located dwellings. An appealing perspective composition, therefore, often largely depending upon a beautiful tree or a slow growing garden development, confusing the true value of the exterior as an architectural design, was rather inclined to arouse the Jurists' suspicion that the house was perhaps lacking in some important essential either in plan or design,—and in the estimation of the competitor himself, it had required such doubtful adjuncts in order to interest either the Jury or its future owner in the proposition! Consequently the Jury were all the more inevitably thrown back upon the careful analysis and study of the plan, and its required elevations, for the final grading and the proper architectural standard that the design was to hold in their estimation. It might again be said that far too many of the competitors avoided giving the proper amount of study to their plans, and consequently failed to perfect them in details of greater or less importance; and it might also be stated that the greater majority of the exteriors, as presented in the perspective, appeared to greater advantage than they actually would, when realized in construction upon a lot in some American suburb or village community. On the other hand, it is fair to say that in several instances, based upon the judgment of the elevations rather than the accompanying perspective, that the house would appear to even better ad-

vantage than it had been within the ability of the competitor to indicate in his perspective.

It might be of interest also to add, that the drawings grouped themselves into two major classifications; first, of over-large projects, in which case the designer was often put to considerable labor to justify his design, or in some cases that the houses were so extremely modest as probably to fail of appeal to the majority of the American public; who are, after all, too inclined when purchasing a house, to demand something that appears to be more expensive and pretentious than it actually is—a matter rendered considerably difficult to anyone limiting himself, in perfecting his design, strictly to the requirements of the 50 foot lot. It is also interesting to note that, of the twelve designs which have received mention or place, eight could be classified as belonging to the informal rather than the balanced classical composition. This was not true of the majority of the plans submitted; but a result of the demand on the part of the Jury for maintaining as high a standard of interest and imagination as possible in judging the competition, and therefore—in cases where other points were felt to be sufficiently equal—preferring the unconventional to the conventional solution.

Others of the competitors, who had gone to some extra effort to obtain an interesting composition; had so broken up the sub-division and the general lines of the building, as to obtain no one harmonious composition, but rather a grouping of several details of such nearly equal importance as to cause them to compete with one another. Simplicity in treatment was also regarded by the Jury as to be desired in a solution of the competition, particularly when the designer was able to produce this effect of simplicity by the lack of expensive detail requiring special mill work or labor in its construction,—and instead secured results by a straightforward use of easily available and inexpensive sizes and shapes of his material.

It was, in several cases conceded that designs which otherwise might be classed as overpretentious or too expensive to construct would, if savings such as were indicated above had been held in mind by the designer, have come well within the limitations established by the competition,—because of the resulting interest and architectural success secured in these simpler plans by the good judgment thus exercised by the competitor.

As a rule, it was discovered that the sketches made of the interiors were not as good, either in presentation or in design, as the exteriors. Oftentimes the competitors had endeavored to obtain interesting interiors by entirely ignoring the element of expense, and including complicated and costly arrangements of paneling in the execution of their interior design. Incidentally, it was interesting to note how prevalent was the use of the earlier type of upright paneling, without cross stiles, in these interior designs,—and how generally fortunate the struggling owners of these houses were in having inherited expensive ship models!

The Jury was interested and pleased to observe that a true appreciation of the best uses of the required material, wood, was generally prevalent among the contestants. It was also noticeable that a considerable number of the contestants had a true understanding of, and had given much study to, the practical requirements of the arrangement of a kitchen for convenience and economic use in the small house, where the wife of the owner would be expected to do most of the housework herself.

To come now to the more detailed consideration of the designs themselves. The one finally placed first, No. 88, selected on the basis already stated at length, seemed to the Jury in many ways to be the nearly ideal solution of a house required to be placed upon a very narrow lot,—altho it was also subject to criticism in one or two minor particulars which some further study of the plan could largely eliminate. The entire northern exposure of the house is insulated from the living portion by hallway, staircase, bathroom, lavatory and closets. This brings, upon the first floor, a possible criticism in the small alcove on the north side of the living room,—so small as to be of doubtful value in obtaining outlook upon the street, or privacy or isolation for the possible student (in fact, the bookcases placed in this alcove might probably better be used as decorations on the walls of the living room); but it is obvious that some further study might bring the living room actually out upon the street frontage of the house—if that was the desire and intention of the competitor,—or rearrange the lavatory so as to use part of this space and possibly thus obtain a larger hall and entrance. Many of the lavatories shown in other

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plans were, by the way, so small as to be absolutely unavailable for the purpose for which they were intended. This same criticism is also true of some of the service entries. The one on this plan is minimum in size, but is nevertheless sufficient to protect the opening of the outside door into the house, and provide space for the refrigerator at a position convenient to the kitchen. The kitchen itself is perhaps too closely related both to hall and dining room; although the Jury never finally settled among themselves as to whether or not it was desirable in a small house still to maintain a pantry or china closet to be used as a passageway between kitchen and dining room! In those cases where a dining alcove is placed immediately out of the kitchen for instance, this separation has obvious customary advantages. Too close a relation of kitchen to the front door has also known disadvantages.

The porch in this plan does not depend upon side outlook, nor is it so large as to cut off southern sun from either dining or living room. The dining room is so placed as to get the eastern sun, the living room such western sun as is available upon so small a plot plan. The width of the house, 29 feet 6 inches, in undoubtedly the minimum possible in a problem of this sort, with the conditions such as we have already established. The second floor is well arranged, and the upper rooms are as large as could be expected in a plan of this sort; while the simplicity of its arrangement and compactness both make for low cost in building,—a matter that is further established by the simplicity of detail shown by the designer in his exterior.

Possibly the circular windows are unnecessary in the design. They serve merely to provide light in closets, a matter of doubtful practical value, although in such a climate as Baltimore they would be very desirable for obtaining a through draught. It might perhaps also have been better, with so important a group as three windows that appear over the entrance, to have lighted the second story bath from the side of the front gable and given all the window space to the hall—which would have avoided the practical defect that, in the evening, at least, the facade of the house would look unbalanced from the fact that then two of the windows of the group would be lighted, while one of the three would generally remain dark. The plot plan could be criticized from the fact that the drying yard—indicated in the extreme rear of the lot—is at a location very remote from the house; and finally, the interior chosen for illustration by the competitor hardly seems in its development to justify the importance he appears to have placed upon it. The designer is to be commended for the fact that he has not depended upon treillage or planting for the appearance of his house, although his perspective is interestingly and well rendered and presented. He also has the good judgment to make his gable toward the street of less importance in height and treatment than the prevailing roof line running east and west.

The design placed second, No. 58, is an example of the solution where southern frontage upon the street has been adopted by the competitor. It contains much to commend it, but was at the same time regarded by some of the Jury as being a decidedly less acceptable solution of the narrow lot requirements of the program. It depends in large part upon the fact that adjoining property remains unbuilt upon, for its value to those living within the dwelling, and in fact the competitor indicates that he himself approaches the house from this point of view by the location from which he has presented his perspective—one impossible if the house on the lot at the east of his dwelling had been built! It is, however, an ingenious and clever solution of the development of the narrow lot by the placing of the narrowest possible house upon it.

The designer is probably to be criticized for not availing himself to the full of the advantages of the southern exposure which he has selected. He blocks the south end of his living room—which is practically his only street outlook—by placing his fireplace entirely across that end of the room. In doing this he prevents any door or French window opening directly upon the street porch,—and the latter itself is of somewhat dubious value, as it would certainly provide no privacy to those using it, if the street was an important one, or the location of the house was in a suburb near any large city. It is true that the exterior treatment given this solution indicates more of the village or country type, as the one that was in the mind of the competitor. The arrangement of the kitchen, rear entry, and the service portion of the plan is very good, especially the convenience of access to the cellar stairs. The toilet is too small. Upon the second floor

the author again fails to obtain for the occupant of the intermediate bedroom the south outlook to which he is entitled. The staircase coming directly from the living room is not to be considered as a wholly desirable arrangement by the Jury; nor is the staircase carried up between walls generally attractive. Nevertheless, accepting the disadvantages of the latter, the staircase opens from the nearest possible point in relation to the entry.

The designer, in the judgment of the Jury, has made the most of the artistic possibilities latent in his plan. His design is simple, unpretentious, well composed, small in scale, homelike and attractive,—and both the sides presented in his perspective and the west side shown in his elevation, are pleasingly and simply presented. He has also produced by simple means a pleasing suggestion of his living room, with atmosphere and homeliness both apparent. His elimination of all expensive detail requiring special millings or labor, would tend to counteract the somewhat greater—and therefore, more costly—amount of exterior wall surface presented by his solution of the problem. However, the square plan is *not* always the least expensive to build. The long and narrow plan possesses inherent advantages of short joists length and low roof span, to compensate for its economic disadvantages in length. Both the exterior and interior of this design possess an unusual amount of architectural interest that is harmonious with the plan,—once the long and narrow house is accepted as a plausible solution of the problem of the narrow lot. It nevertheless remains a design that would normally be better suited to a more rural development, with wider lots, or to a village rather than a suburban site.

The design given third place, No. 117, would have been placed higher if the Jury had not felt that the facade was lacking in originality and architectural interest. There is also a question whether the provincial type of house having the early overhang of the second story, would be likely to possess as elaborate a type of cornice as indicated in this design. The plan is nevertheless the best from among the number that adopted a similar outline for their solution: It is altogether too wide for the lot, however, running to 35 feet outside the chimney, in width. It is economical to construct, so far as the plan arrangement is concerned; and simple and convenient in the disposition of the room, particularly on the first floor. The kitchen is an unusually good working space, with a pleasant breakfast nook to the north. While the kitchen does not open directly into the front hall, it is convenient to the cellar stairs and lavatory. It does not have sufficient separation from the dining room; and the plumbing, as planned, would require two stacks, an element of some additional expense in a small house plan. The porch would be only 6 feet away from the west lot line, which is too close for proper privacy for the inhabitants. The interior perspective shows a simple and interestingly presented room.

The fourth design, No. 126, is acknowledged one of the most competent. It presents a small cottage, with a well arranged kitchen upon the north, and dining room and living room across the south side. The plumbing is not well arranged; as three stacks would be required,—far too expensive a disposition for such a small house as this. The kitchen, also, is not sufficiently separated from the dining room, and again the western end of the porch comes immediately upon the side lot line. Both exterior and interior perspective are adequately but simply drawn. The entrance doorway is perhaps almost too modest for even so modest a cottage as this, and it is more than questionable whether it is desirable to divide a 50 foot lot in two with a fence, as has been shown in the perspective and plot plan. Other than the plumbing, this design would undoubtedly make an attractive cottage house and one that would be inexpensive to build.

The eight mention designs again presented to the Jury a problem that caused considerable discussion,—and they were only selected after painstaking thought and consideration of all possible contestants for this honor. A large part of the drawings submitted in the competition were again gone over by the Jury, a number of plans were drawn out and compared in connection with those first tentatively set aside to receive mention. After making one or two changes, the Jury came unanimously to the conclusion that they had made what was, in their judgment, the best selection from the material that was available. They did not attempt to place these designs in any order of excellence; feeling that, as all were to be given an equal honorarium, any such attempt would be invidious and unnecessary under the circumstances.

The design shown in No. 129, at several times in the dis-

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cussion, was considered for a higher position; but the close study and analysis of plan and elevations (disregarding the engaging character of the perspective, which portrays such a house on a country or village site of considerably larger area than the lot described;—and as it might appear after twenty or twenty-five years of occupancy), convinced the Jury that it was not, on its merits, as good as the designs that were finally given preference. The plan has a toilet evidently entirely for family use, as it is entered from the inside of the house only through the kitchen. The living room is rather narrow for its length, the staircase opens from it, and the entire length of the room has to be traversed in crossing from the entrance vestibule. The second story plan confesses its weakness by the corners of two rooms cut off at the north; and while the bath room is unusually large and commodious, the exterior of the house—as shown in the two elevations—is not as well nor as simply composed as many of the other contestants. It seemed to the judges a somewhat forced and trickily devised scheme, while the interior perspective shows an altogether incorrect pitch to the staircase, and the generally illiterate arrangement of panels over the fireplace, which produces a center stile. The width of the house, including the porch, is 38 feet; and the driveway has been placed upon the side near the entrance. There could only possibly be 5 feet from the edge of the porch to the adjoining lot line,—therefore a considerable amount of the overgrown garden shown in the perspective (so essential to the appearance of the house from this point of view) would actually be growing upon the neighbor's property! The beauty of the rendering is accepted without remark, other than the comment that it is obviously not as well adapted to the necessary reduction as some of the simpler perspectives.

No. 78 is another design where the clever emphasis of its good points in the perspective is calculated to blind one, at first sight, to the defects that develop in its architectural treatment, when one turns to the study of the elevation. The plan is well arranged, although, as the house faces to the south, only one room upon each floor has windows opening from that exposure. The kitchen is unusually well separated from the dining room and hall, by the convenient arrangement of pantry, refrigerator, entry and passage to the front door and cellar stairs, which are compounded in this plan within the one area. The plumbing is also unfortunately separated, three stacks again being required in its installation; while a considerable amount of space is wasted by extending the staircase so far to the east as was done, in order to work out the roof scheme shown in the exterior. Attention also should be called to the discrepancy between the treatment of the hipped gable toward the street, and the extended roof ridge on the gable to the north. In this plan—as in many others—provision is not made for a convenient laundry yard; possibly on the basis that a small family would normally send the laundry out; allowable enough, and possibly the custom where there are no small children, when a certain amount of laundry work is both necessary and desirable in the house,—but, even with the childless married couple in view, a certain amount of light washing is always conveniently to be done in the house, and little, if any, provision for permitting this appears in most of the plans shown in the competition.

No. 90 shows a nice and simple plan, with the practical inconvenience of a deck on top of the roof, a kitchen that shares the difficulties of the inside type of kitchen of the prize winning design, and a toilet on the first floor altogether too small for practical use. The arrangement of the plumbing requires two soil stacks, and a certain amount of space to be wasted in the hall on both stories. The house faces north and is placed by the designer in the center of his lot. While evidently he has striven to avoid a conventional arrangement in the street facade, it is doubtful if he has in exchange succeeded in obtaining anything that is either very original or strikingly successful in result.

No. 66 is to be commended for an effort to avoid a conventional elevation. In referring to earlier colonial precedent for his idea and treatment of overhang, the competitor has nevertheless succeeded in striking out a novel arrangement, despite the deck shown on his elevations (which could probably be eliminated by further study without injury to the appearance of his design). The house substantially conforms to the economical attainments of the square plan; being 29 feet 6 inches wide and 27 feet deep. In carrying the overhang entirely around the building—an element, by the way, of additional expense, particularly in some localities where a "balloon frame" type of construction is usually em-

ployed,—it seems to suggest its derivation from the "block house" or "garrison house" still to be found in some old New England communities. The kitchen is convenient, contains a small breakfast alcove, and is separated from the front door,—but it has the awkward form of a staircase carried up between walls. The plan is complicated somewhat by the arrangement of the plumbing—although it could probably all be gotten into two stacks—and by the division of the chimney support into two piers and the provisions otherwise made to carry it arbitrarily to the point in which it was desirable for it to appear upon the front elevation. In the opinion of some of the judges, the eight sided window used as a central feature upon the second story was not wholly successful.

No. 98 was a design, which was the cause of considerable discussion during the process of the competition judgment. Undoubtedly one of the most interesting in its exterior expression, harking back to well-known precedent in New England; and one of the few providing a convenient and well enclosed service yard,—it was nevertheless felt to be a necessarily expensive type of arrangement to build,—which finally prevented its being placed for a prize in this competition—despite the undoubtedly superior interest of the house, and the cleverness of the plan, which provides an unusually good kitchen, well separated from the dining room—if a somewhat relatively long distance from the front door. The rear entry, with relation to kitchen and cellar stairs, and supplying wood for the living room fireplace, is exceptionally well placed. The plumbing is so separated so as to require two large size stacks, and the "garage porch" is placed too near the street for privacy, and has necessarily to be estimated as a porch in regard to the cubic contents, as provided in the limitations of the program. The bedroom over it is at a considerable distance from the bath, and the roof is so very broken as to be necessarily rather expensive to build. Nevertheless, the house presents—next to the second prize design—what is undoubtedly the most interesting and "different" solution obtained in this competition, and the treatment of the interiors indicated would produce rooms of atmosphere, and allow for taste and individuality in furnishing and decoration. Both exterior and interior perspectives are somewhat sketchily, and possibly incorrectly, rendered,—and only an adoption of a small glass-size—6 x 8 inches; for each; historically accurate, by the way—keeps the house in scale with its dimensions.

No. 52 is a similar type of plan to the one given third prize. In the judgment of the Jury it was not as successfully worked out,—although the kitchen is perhaps better separated from both dining room and hall. The second story hall wastes a certain amount of space, however; and there is very little opportunity to get connection between kitchen range and chimney, which in some sections of the country would be required,—and is therefore somewhat of a disadvantage. The interior is simple and well suggested, the exterior endeavors to emphasize the length and lowness of the house by the frieze treatment shown. The front door detail treatment shows a striving for "something different,"—that is entirely adaptable to construction in wood, without perhaps very much improving upon established colonial precedent! The house would not be an inexpensive one to build, however, on account of the number of details called for by this design, and the amount of unnecessary and additional lattice work shown upon the lot.

No. 99 is an interesting and simple design. The plan is somewhat different from any other given place or mention by the Jury. The breakfast porch may be treated as either an indoor or an outdoor room, apparently; and while the entrance detail shown is a bit wide and crude in composition, and the interior sketch of the fireplace not very well thought out nor developed,—the designer has, nevertheless, obtained a pleasing grouping on the exterior,—by a simple expedient which apparently did not occur to any other competitor. It gives the house a pleasingly informal character, makes a more artistic composition and apparently does not detract from the workability of the plan.

No. 39 was another design that caused much discussion among the Jury. It was believed to be an entirely logical development of a house fronting north upon the street, but one or two members felt that the kitchen was thrown too far forward from the main house for appearance,—while it is nevertheless well arranged for use, well separated from dining room and hall and, although it necessitates a second stack in the plumbing, this stack need be only a 2 inch one.

(Continued on page 96)

PENCIL POINTS



CUBAGE

Main Body of House.

$$23^{\text{ft}} \cdot 6^{\text{in}} \times 23^{\text{ft}} \cdot 6^{\text{in}} \times 23^{\text{ft}} \cdot 0^{\text{in}} = 21,816$$

Gable front.

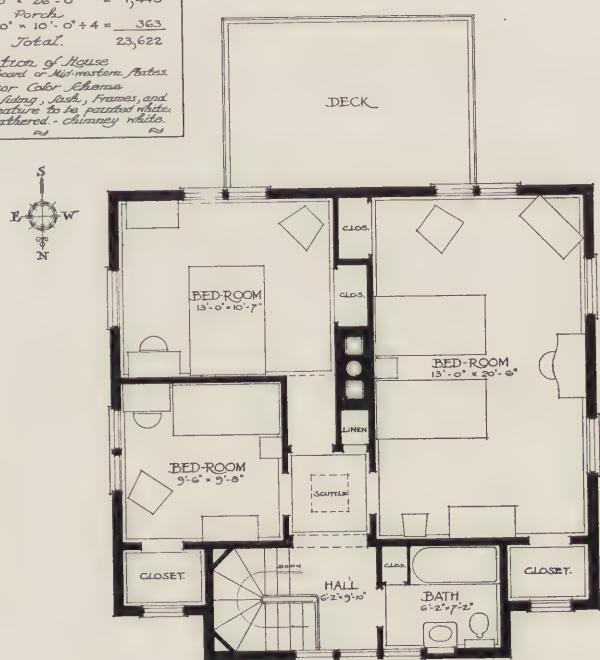
$$10^{\text{ft}} \cdot 6^{\text{in}} \times 3^{\text{ft}} \cdot 0^{\text{in}} \times 26^{\text{ft}} \cdot 0^{\text{in}} = 1,443$$

Porch.

$$14^{\text{ft}} \cdot 6^{\text{in}} \times 10^{\text{ft}} \cdot 0^{\text{in}} \times 10^{\text{ft}} \cdot 0^{\text{in}} \div 4 = .363$$

Total. 23,622

Location of House
Atlantic seaboard of my western states
Exterior Color scheme
White paneling, lath, Frames, and
exterior coating, to be painted white



~ DESIGN FOR A SIX-ROOM SUBURBAN HOUSE ~

FIRST PRIZE DESIGN
Submitted by Owen Lau Gowman, New York, New York.

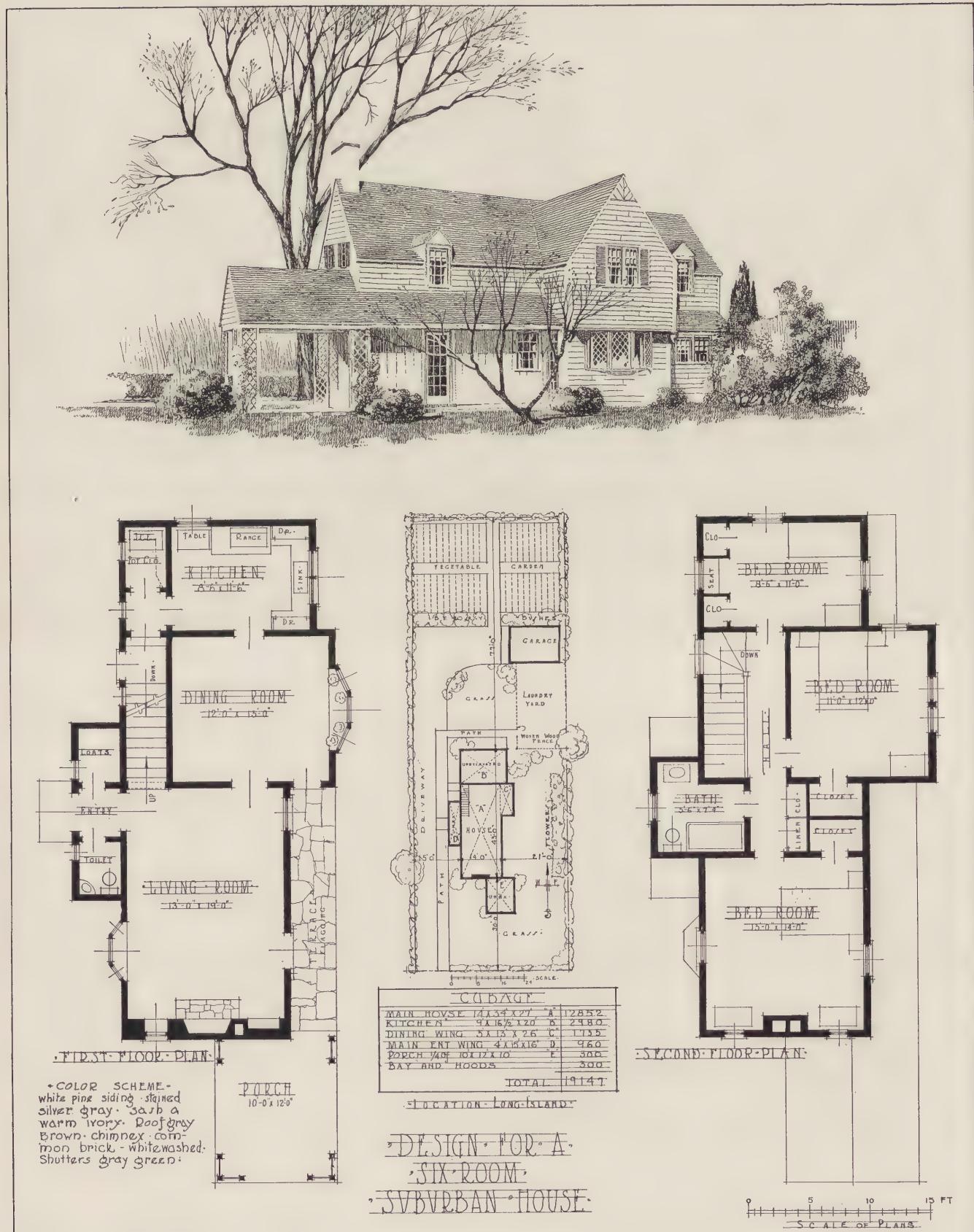
PENCIL POINTS



~ DESIGN FOR A SIX~ROOM SUBURBAN HOUSE ~

FIRST PRIZE DESIGN, Detail Sheet.
Submitted by Owen Lau Gowman, New York, New York.

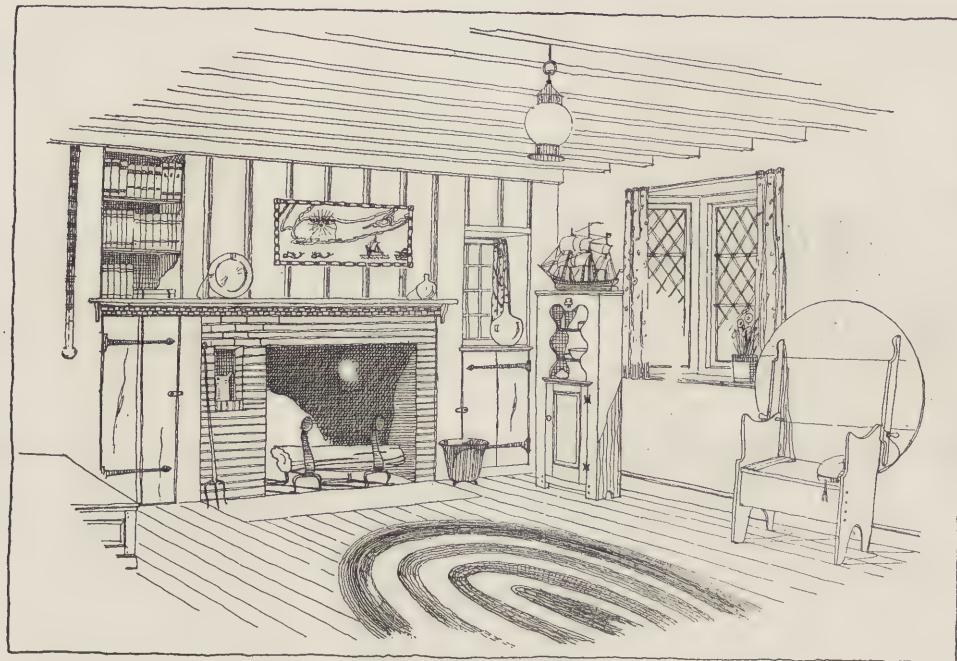
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SECOND PRIZE DESIGN

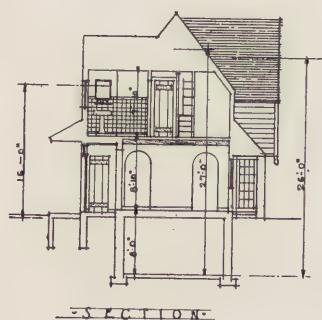
Submitted by Arthur W. Coote, New York, New York.

PENCIL POINTS

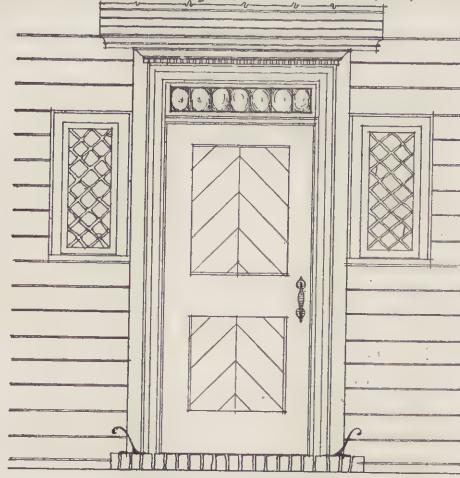


SOUTH WALL OF LIVING ROOM.

Panelled end of knotty pine boards stained light brown - rebalanced and waded.
Floor of wide pine boards painted a dull burnt orange. Side walls of
white plaster unevenly applied and glazed with burnt sienna and
Vandyke's brown. Mantel facing of second hand (used) brick.



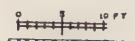
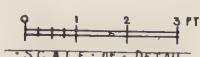
-SECTION-



MAIN ENTRANCE



EAST ELEVATION



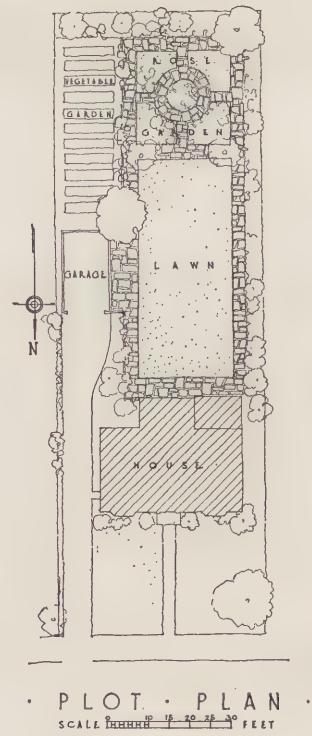
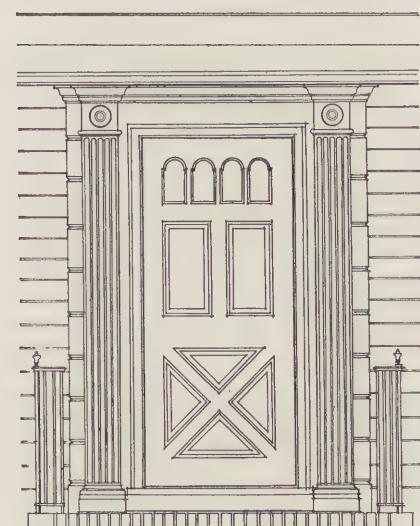
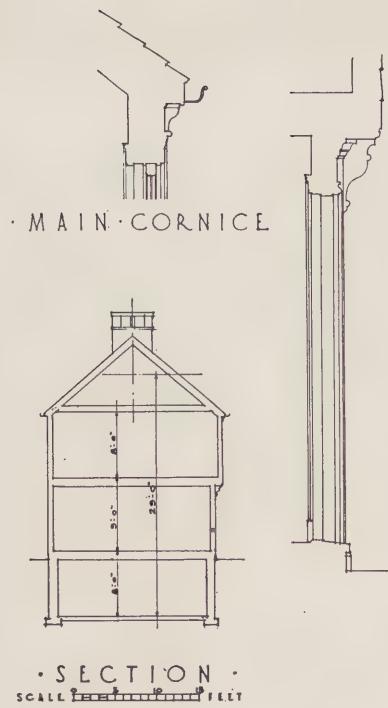
WEST ELEVATION.

DESIGN FOR A
SIX ROOM
SUBURBAN HOUSE

SECOND PRIZE DESIGN, Detail Sheet.

Submitted by Arthur W. Coote, New York, New York.

PENCIL POINTS

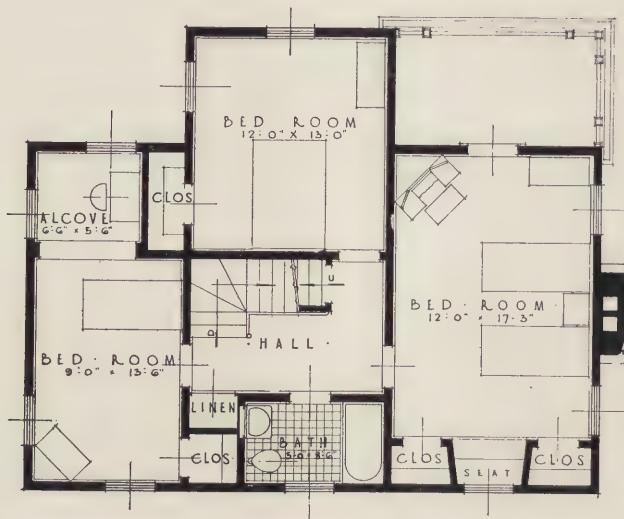


Design for
A SIX ROOM SUBURBAN HOUSE

THIRD PRIZE DESIGN

Submitted by Amedeo Leone and H. A. Surman, Detroit, Michigan.

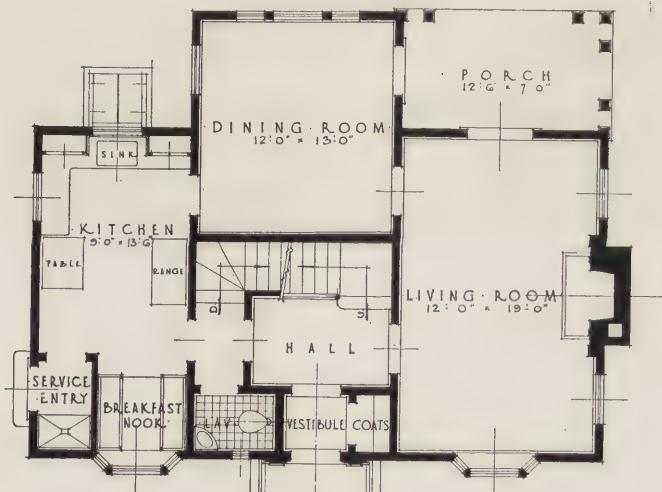
PENCIL POINTS



SECOND FLOOR PLAN

SCALE 0 5 10 15 FEET

CUBICAL CONTENTS:	
MAIN HOUSE	
20'0" x 35'0" x 29'0" = 20,300	
PORTION OF DINING ROOM	
13'0" x 7'0" x 26'0" = 2,366	
PORCH	
12'6" x 7'0" x 12'0" + 4 = 262	
TOTAL	22,928



FIRST FLOOR PLAN

SCALE 0 5 10 15 FEET

LOCATION

SUBURBAN ENVIRONMENT
OF MIDDLE WEST - OR
EASTERN STATES.

EXTERIOR PAINTED WHITE
CHIMNEY - PAINTED WHITE
SHUTTERS - APPLE GREEN
ROOF - STAINED BROWN



FRONT ELEVATION

SCALE 0 5 10 15 FEET



SIDE ELEVATION

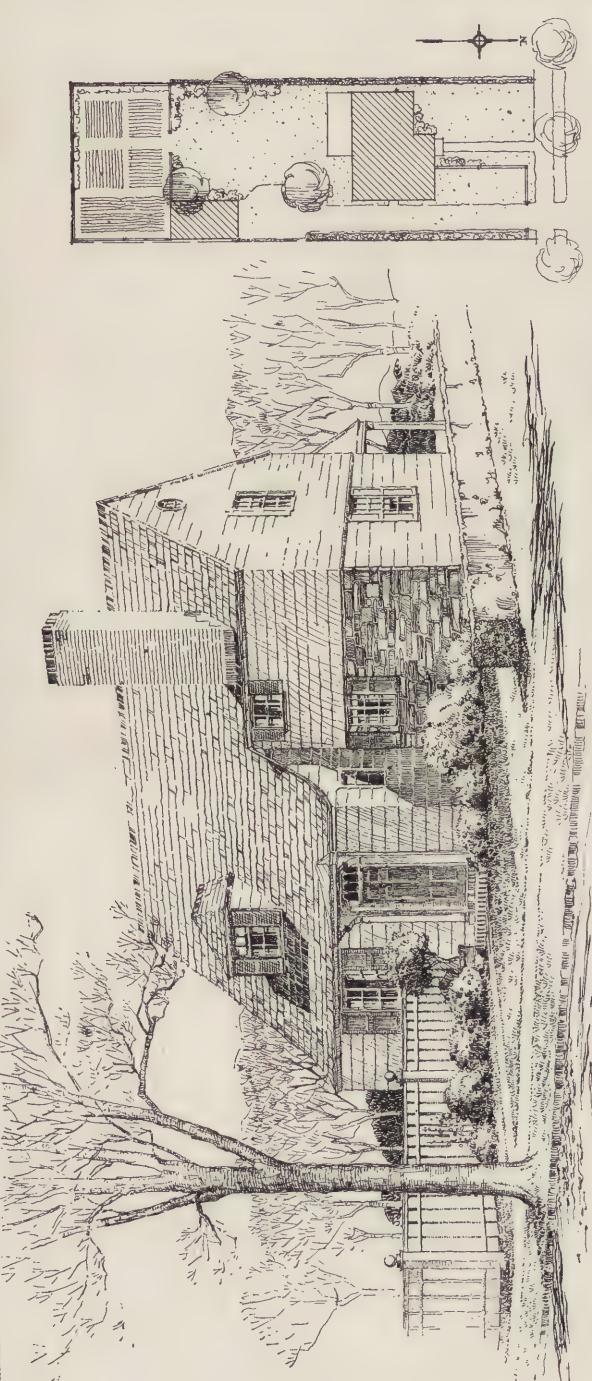
SCALE 0 5 10 15 FEET

Design for

A SIX ROOM SUBURBAN HOUSE

THIRD PRIZE DESIGN, Detail Sheet.

Submitted by Amedeo Leone and H. A. Surman, Detroit, Michigan.

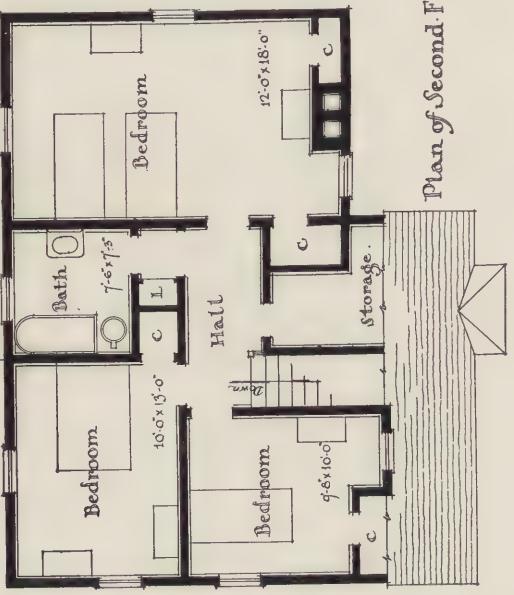


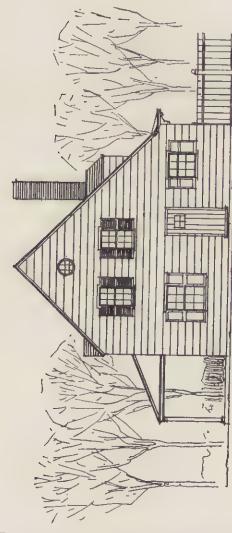
CUBAGE
HOUSE
 $21 \times 34\frac{1}{2} \times 28\frac{1}{2}$ - 20300
 $7 \times 22 \times 20'$ - 3080
PORCH
 $\frac{8' \times 21' \times 10'}{4}$ - 420
TOTAL 23800

COLORS
BODY-CREAM WHITE
BLINDS-APPLE GREEN
ROOF-DARK BROWN

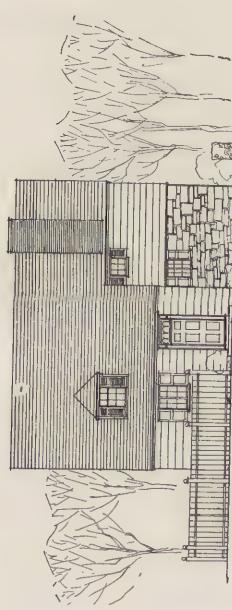
LOCATION
NORTH ATLANTIC
STATES

DESIGN for a SIX-ROOM SUBURBAN HOUSE





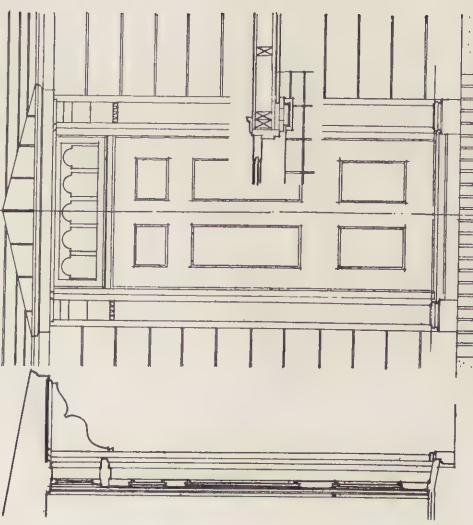
East Elevation.



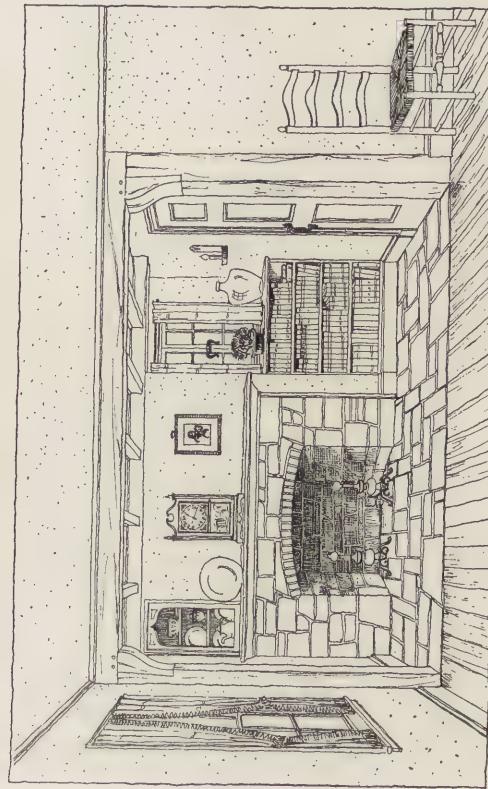
North Elevation.



Section.



Section. Elevation of Main Entrance



Perspective of Living Room Alcove

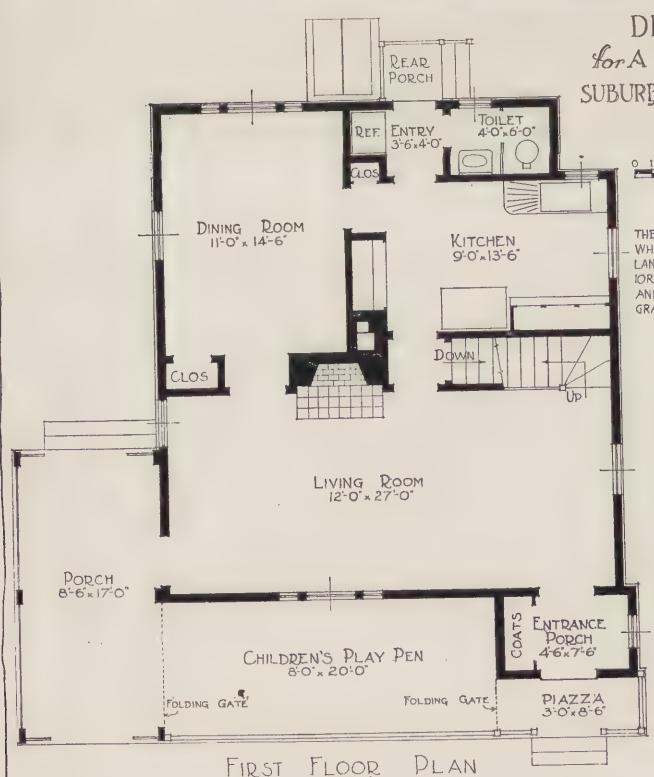
DESIGN for a SIX-ROOM SUBURBAN HOUSE

FOURTH PRIZE DESIGN, Detail Sheet.
Submitted by Lewis E. Welsh, New York, New York.

PENCIL POINTS

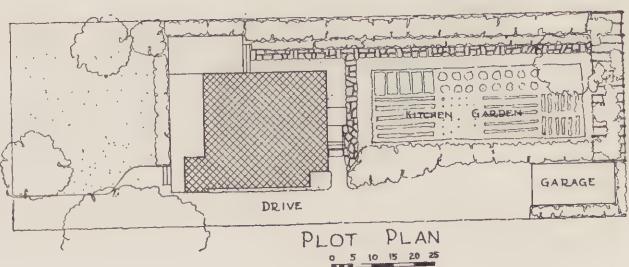
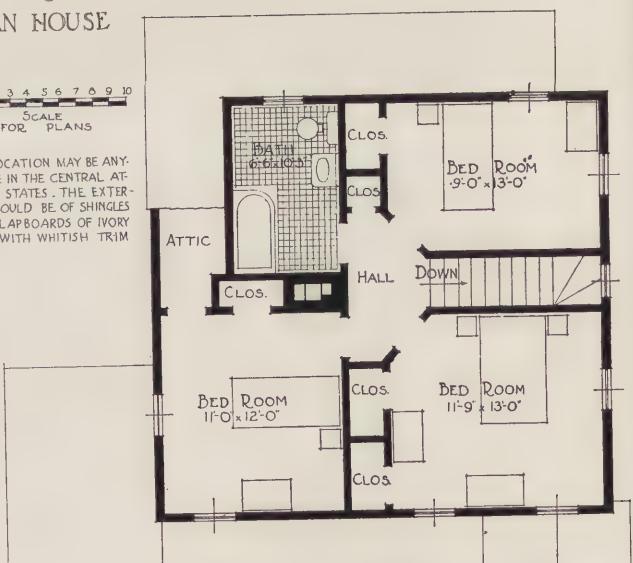


DESIGN
for A SIX ROOM
SUBURBAN HOUSE



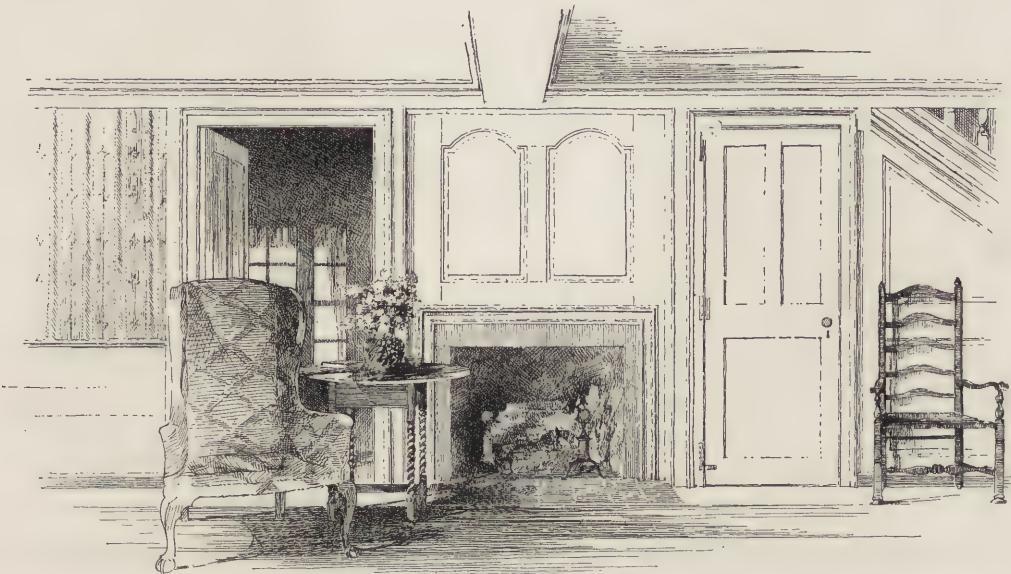
CUBAGE

MAIN BLOCK OF HOUSE	$28 \times 25'6'' \times 28'6'' =$	20349
LESS BLOCK AT 'A' (SEE CROSS SECTION) =	185	
PLUS BLOCK AT 'B' (SEE CROSS SECTION) $24'6'' \times 4'6'' \times 18'$ =	1985	
ENTRANCE PORCH $8'6'' \times 5'10'' =$	425	
PIAZZA $8'6'' \times 3'6'' \times 4'6'' =$	34	
CHILDREN'S PLAY PEN $20'0'' \times 8'6'' \times 4'6'' =$	191	
PORCH $11'6'' \times 8'6'' \times 11'$	409	
REAR PORCH $3'6'' \times 4'6'' \times 4'6''$ PLUS STEPS $0'6'' \times 8'11'' =$	20	
	TOTAL	23256



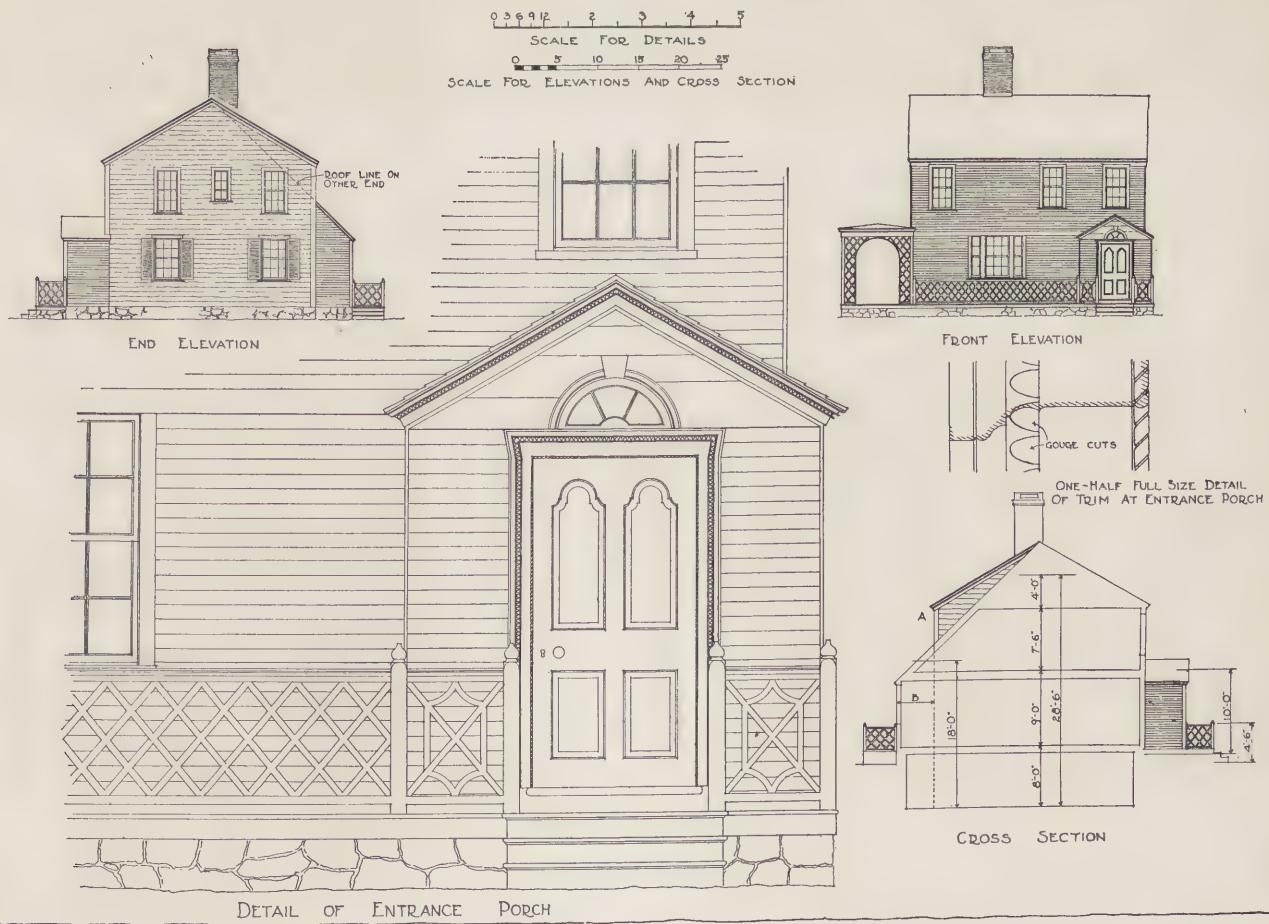
MENTION, Design No. 129.
Submitted by Richard M. Powers and Theodore T. Jordan, Boston, Massachusetts.

PENCIL POINTS



FIREPLACE SIDE OF LIVING ROOM

DESIGN for A SIX ROOM SUBURBAN HOUSE



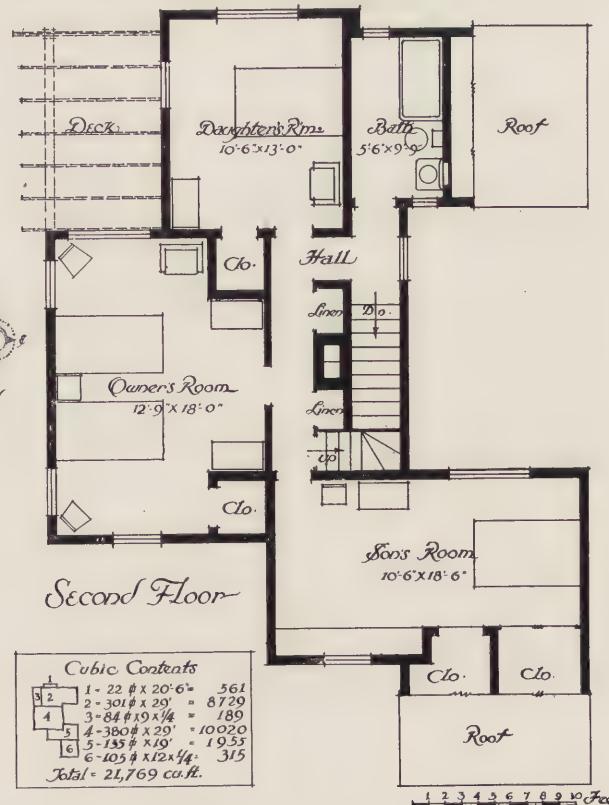
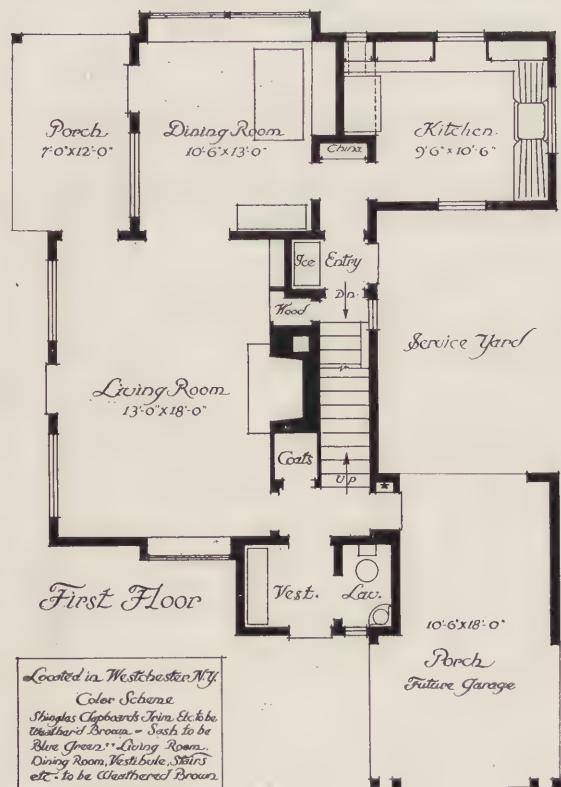
MENTION, Design No. 129, Detail Sheet.

Submitted by Richard M. Powers and Theodore T. Jordan, Boston, Massachusetts.

PENCIL POINTS



Design for A Six-Room Suburban House

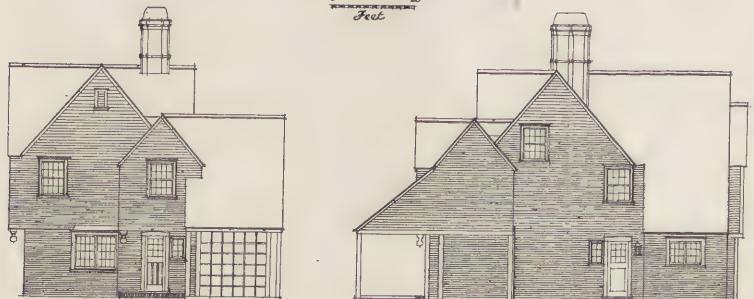
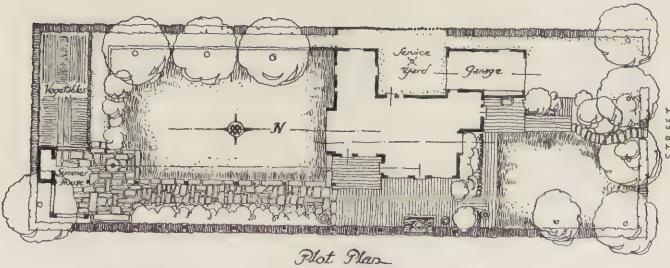


MENTION, Design No. 98.
Submitted by William Stephen Boice, Yonkers, New York.

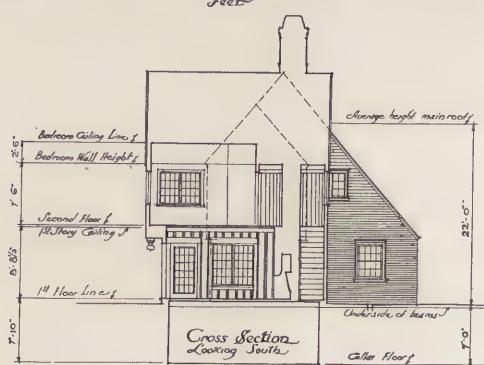
PENCIL POINTS



*Design for A
Six-Room
Suburban House*



North & Front Elevation 9'-0" 10'-0" 11'-0" 12'-0" 13'-0" 14'-0" 15'-0" 16'-0" 17'-0" 18'-0" 19'-0" 20'-0" Feet Side & West Elevation & Service Yard.



Entrance 0 3 6 9 12 24 36 48 60 Inches

MENTION, Design No. 98, Detail Sheet.
Submitted by William Stephen Boice, Yonkers, New York.

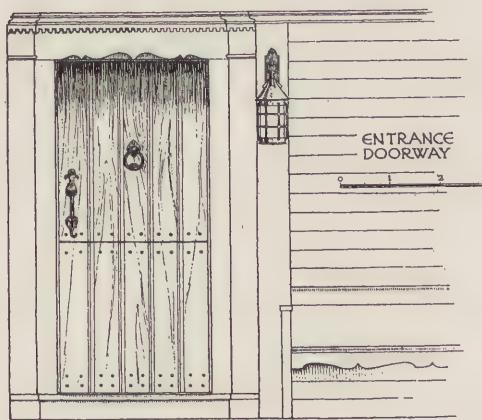
PENCIL POINTS



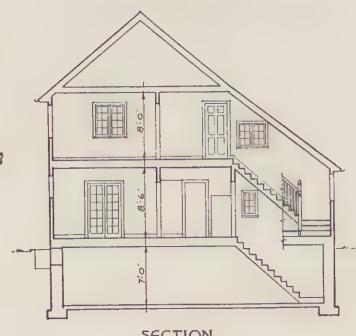
SOUTH ELEVATION



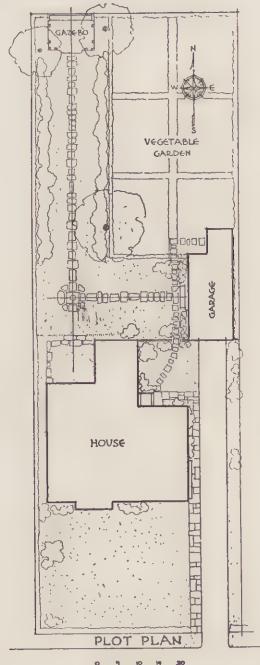
EAST ELEVATION



ENTRANCE
DOORWAY



SECTION



DESIGN FOR A SIX ROOM SUBURBAN HOUSE

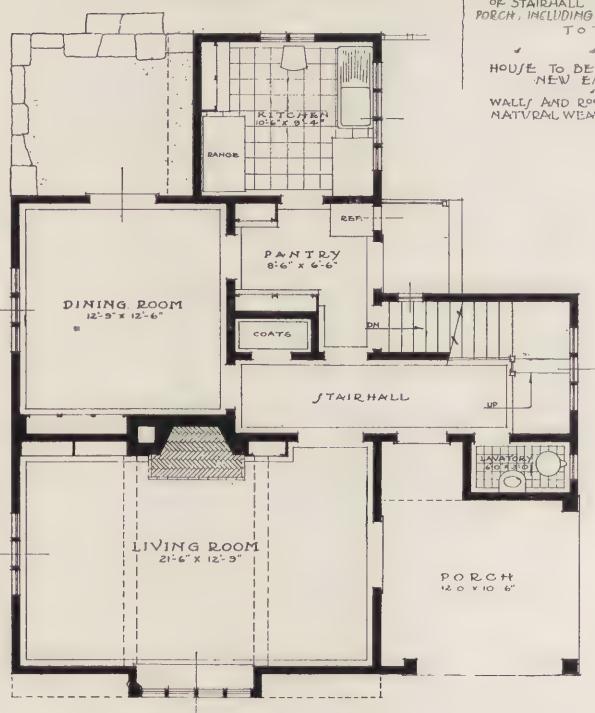
MENTION, Design No. 78.

Submitted by Elliott L. Chisling and Allmon Fordyce, New York, New York.

PENCIL POINTS



FIRST FLOOR PLAN

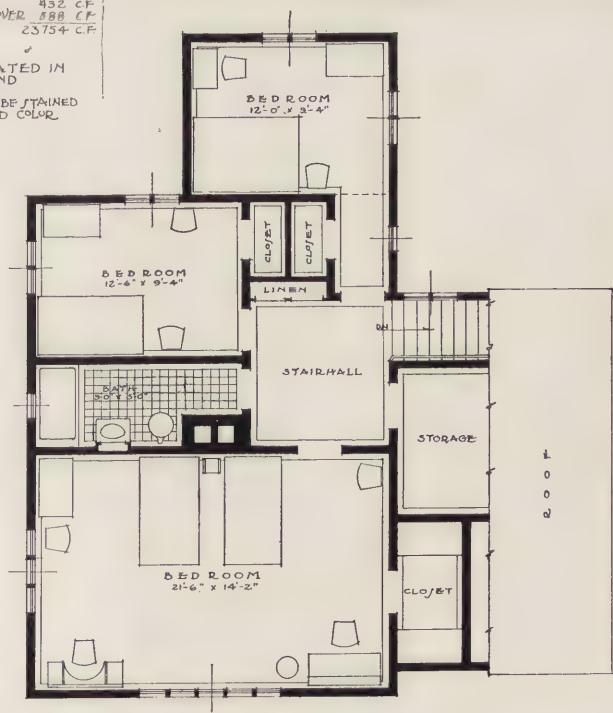


CUBAGE

BASEMENT FLOOR TO BOTTOM OF FIRST FLOOR JOISTS	3113 1/2 CF.
BOTTOM OF FIRST FLOOR JOISTS TO BOTTOM OF SECOND FLOOR JOISTS	866 8 1/2 CF.
BOTTOM OF SECOND FLOOR JOISTS TO MEAN HEIGHT OF ROOF	10932 CF.
SECOND FLOOR PORTION OF STAIRHALL	432 CF.
PORCH, INCLUDING ROOF OVER	588 CF.
TOTAL	23734 CF.

HOUSE TO BE LOCATED IN NEW ENGLAND
WALLS AND ROOF TO BE STAINED NATURAL WEATHERED COLOR

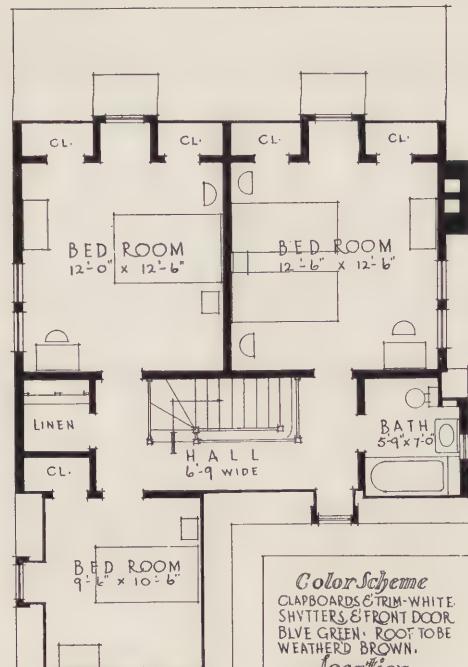
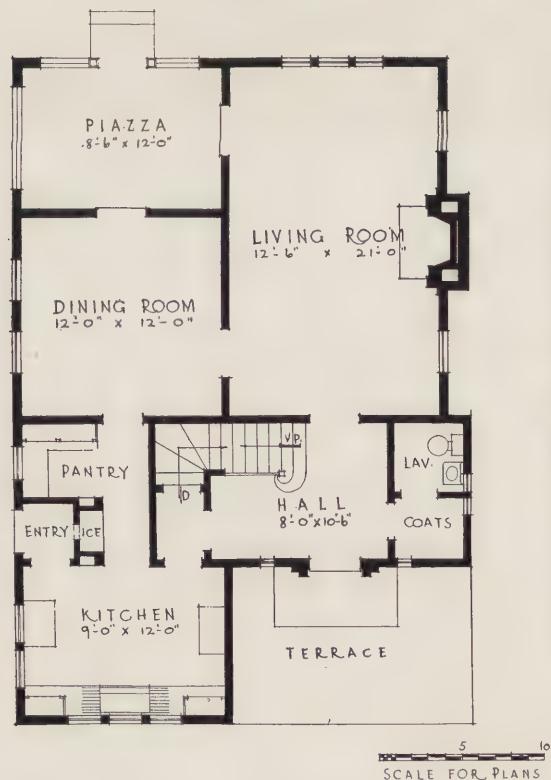
SECOND FLOOR PLAN



DESIGN FOR A SIX ROOM SUBURBAN HOUSE

MENTION, Design No. 78, Detail Sheet.
Submitted by Elliott L. Chisling and Allmon Fordyce, New York, New York.

PENCIL POINTS



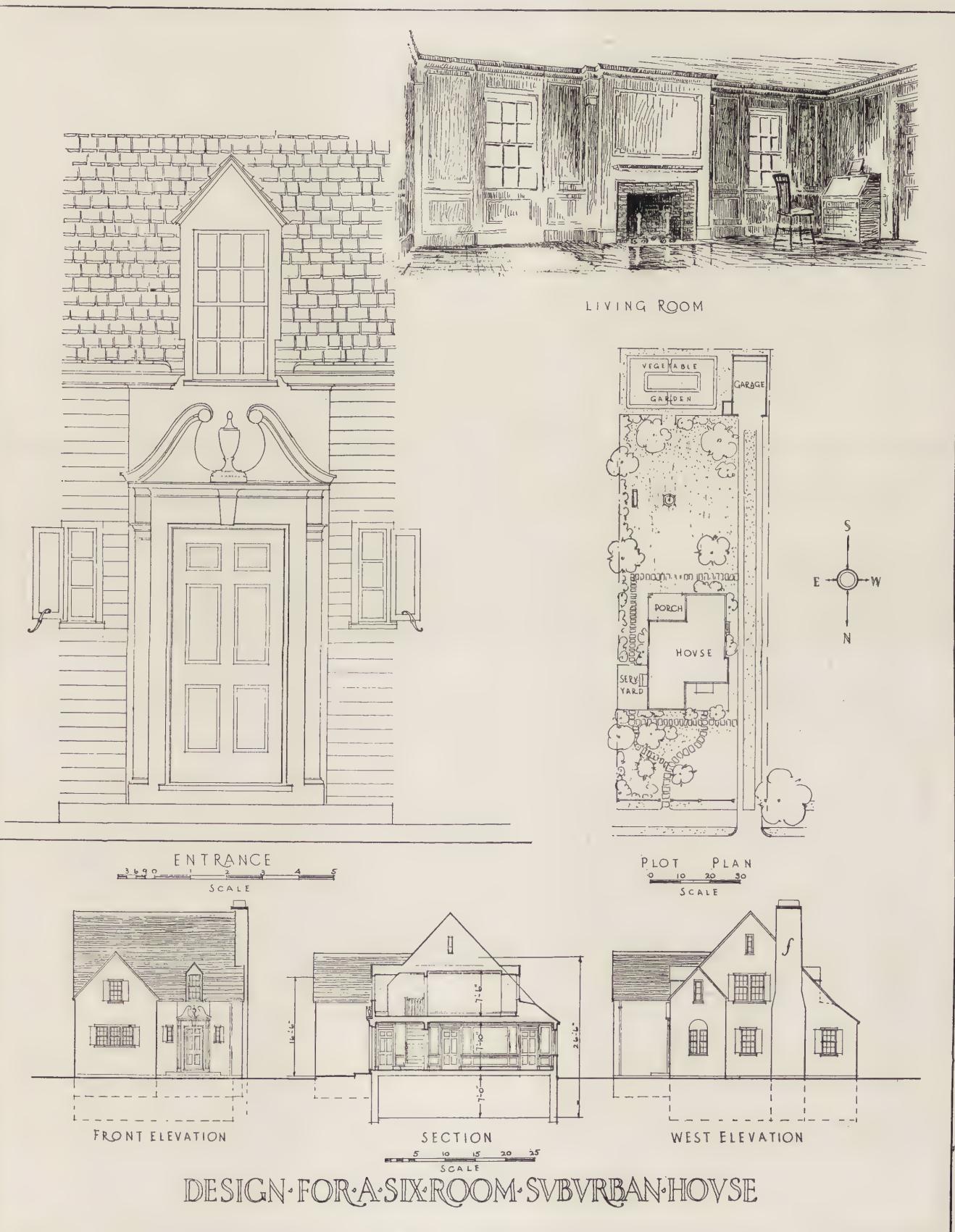
Color Scheme
CLAPBOARDS & TRIM - WHITE.
SHUTTERS & FRONT DOOR
BLUE GREEN. ROOF TO BE
WEATHERED BROWN.
Location
A NEW ENGLAND TOWN.
Cubage
UNEXCAVATED UNDER PORCH
AND KITCHEN ELL.
MAIN HOUSE 21014 CUB FT
KITCHEN ELL 2037 " "
TOTAL 23051 CUB FT

DESIGN for a SIX-ROOM SUBURBAN HOUSE

MENTION, Design No. 39.

Submitted by Sherburne J. Watts, Dorchester, Massachusetts.

PENCIL POINTS



MENTION, Design No. 39, Detail Sheet.
Submitted by Sherburne J. Watts, Dorchester, Massachusetts.

PENCIL POINTS



*Design for
A Six Room Suburban
House*

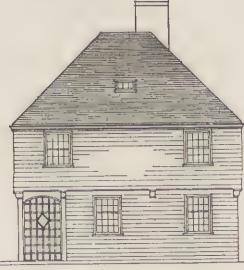


FRONT ELEVATION.

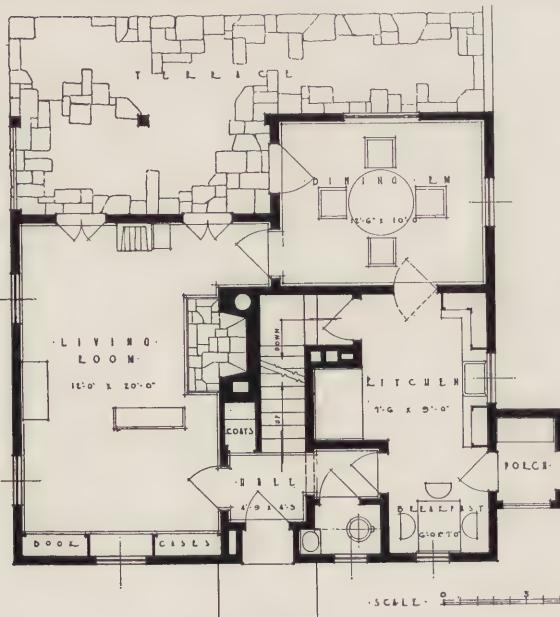
CUBICAL.
2ND FLOOR - 6 - ROOM. 26'0" X 30'3" X 14'0" = 11,858 CUBIT
1ST FLOOR. 27'0" X 29'3" X 9'0" = 7,110 "
BASMENT. 17'0" X 27'0" X 7'0" = 5,215 "
FOLCE - SIDE. 4'0" X 6'0" X 9'0" = 216
TOTAL 22,397 CUBIT.

SCALE 0 5 10 15 20 FEET.

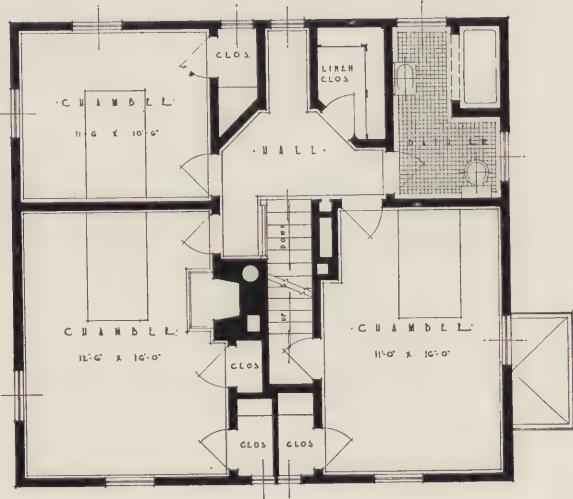
LOCALITY
- SMALL VILLAGE IN THE
ENVIRONS OF BOSTON.
COLOR - SCHMID
EXTERIOR - NATURAL FINISH.
INTERIOR - LIVING ROOM -
NATURAL FINISH.
OTHER ROOMS IVORY WHITE.



SIDE ELEVATION.



FIRST FLOOR PLAN.



SECOND FLOOR PLAN.

MENTION, Design No. 66.

Submitted by J. Douglas Lorenz and Wirt C. Rowland, Detroit, Michigan.

PENCIL POINTS

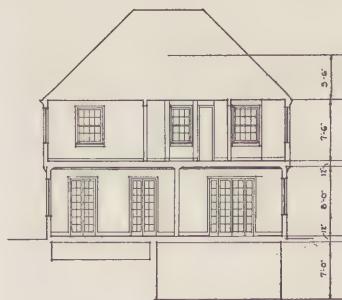


*Design for
A Six Room Suburban
House*



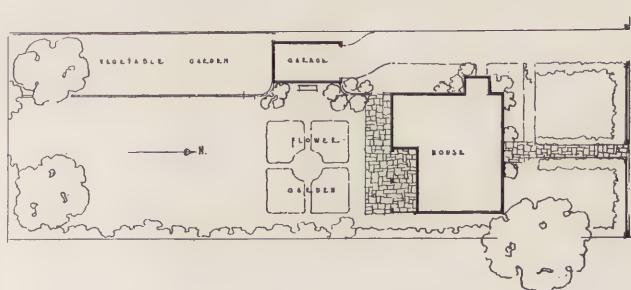
ENTRANCE DETAIL

SCALE 0 10 20 30 FEET



SECTION

SCALE 0 5 10 15 FEET



PLOT PLAN

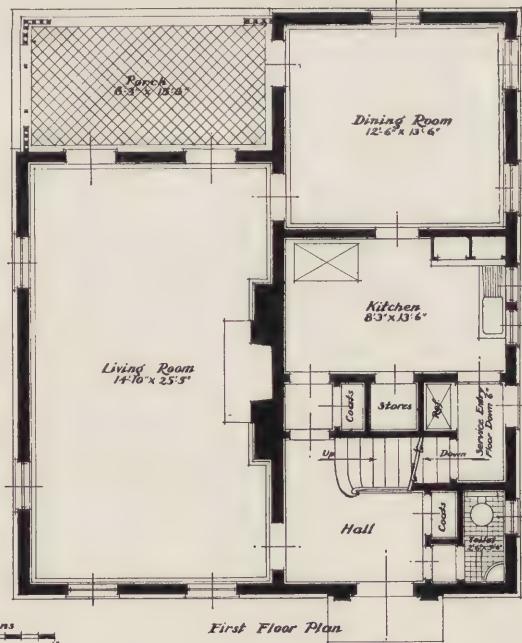
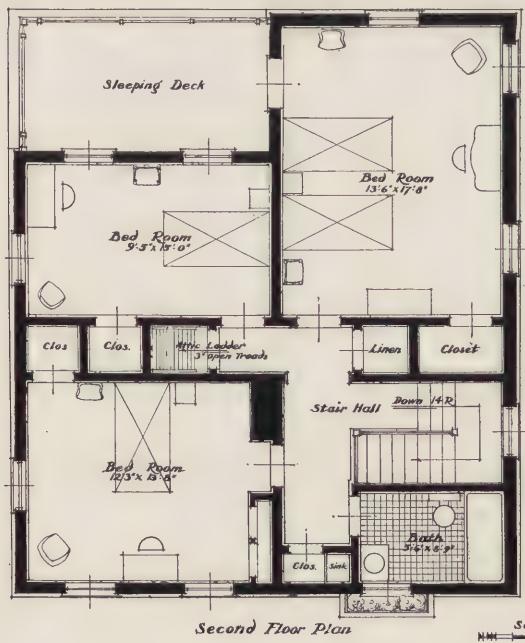
SCALE 0 10 20 30 40 FEET

MENTION, Design No. 66, Detail Sheet.
Submitted by J. Douglas Lorenz and Wirt C. Rowland, Detroit, Michigan.

PENCIL POINTS



~ Perspective View ~



~ Design for ~
A SIX ROOM SUBURBAN HOUSE

~ CUBAGE ~	
Main Portion	Above Grade 8' 3" x 13' 6" x 24' 0" = 16993
Dining Rm Wing	8' 3" x 13' 0" x 20' 3" = 2496
Porch	4' 0" x 8' 3" x 13' 3" x 10' 0" = 315
Cellar Portion	Below Grade 38' 3" x 15' 6" x 6' 4" = 3464
Excavation for air space under Living Rm	26' 3" x 13' 6" x 1' 6" = 622
NOTE: Cellar to be under all of house except under Living Rm & Porch.	23898

~ LOCATION and FINISH ~	
This house was designed for a suburban town near New York City.	
All woodwork to be WHITE PINE	++
Exterior finish to be white painted, clapboards or shingles. Blinds and front door to be black. Front door to be made of mahogany shingles. Front door step stone. Porch floor brick or tile. Chimney to be brick, whitewashed or painted white with black top as shown ~	

MENTION, Design No. 90.

Submitted by William Platt and Henry A. Cook, New York, New York.

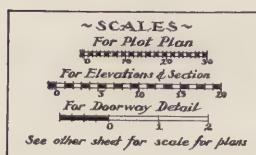
PENCIL POINTS



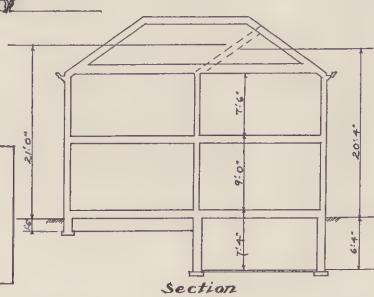
~ Living Room Perspective ~



~Detail of Doorway~



*~Design for~
A SIX ROOM SUBURBAN HOUSE*



Section

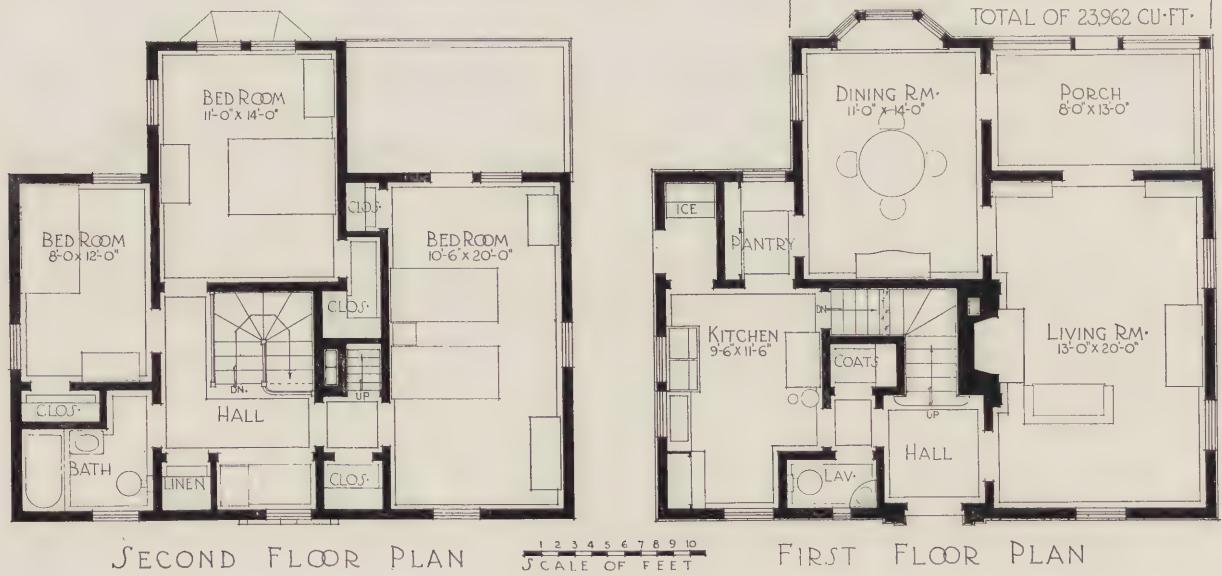
MENTION, Design No. 90, Detail Sheet.
Submitted by William Platt and Henry A. Cook, New York, New York.

PENCIL POINTS



THIS DESIGN IS INTENDED FOR THE EASTERN STATES. TO BE PAINTED WHITE WITH GREY GREEN BLINDS AND DOORS. ROOF TO BE GREY. MAIN HOUSE IS 21X34X29. DINING ROOM PROJECTION IS 8X10X39. BAY WINDOW 2X8X10

TOTAL OF 23,962 CU.FT.

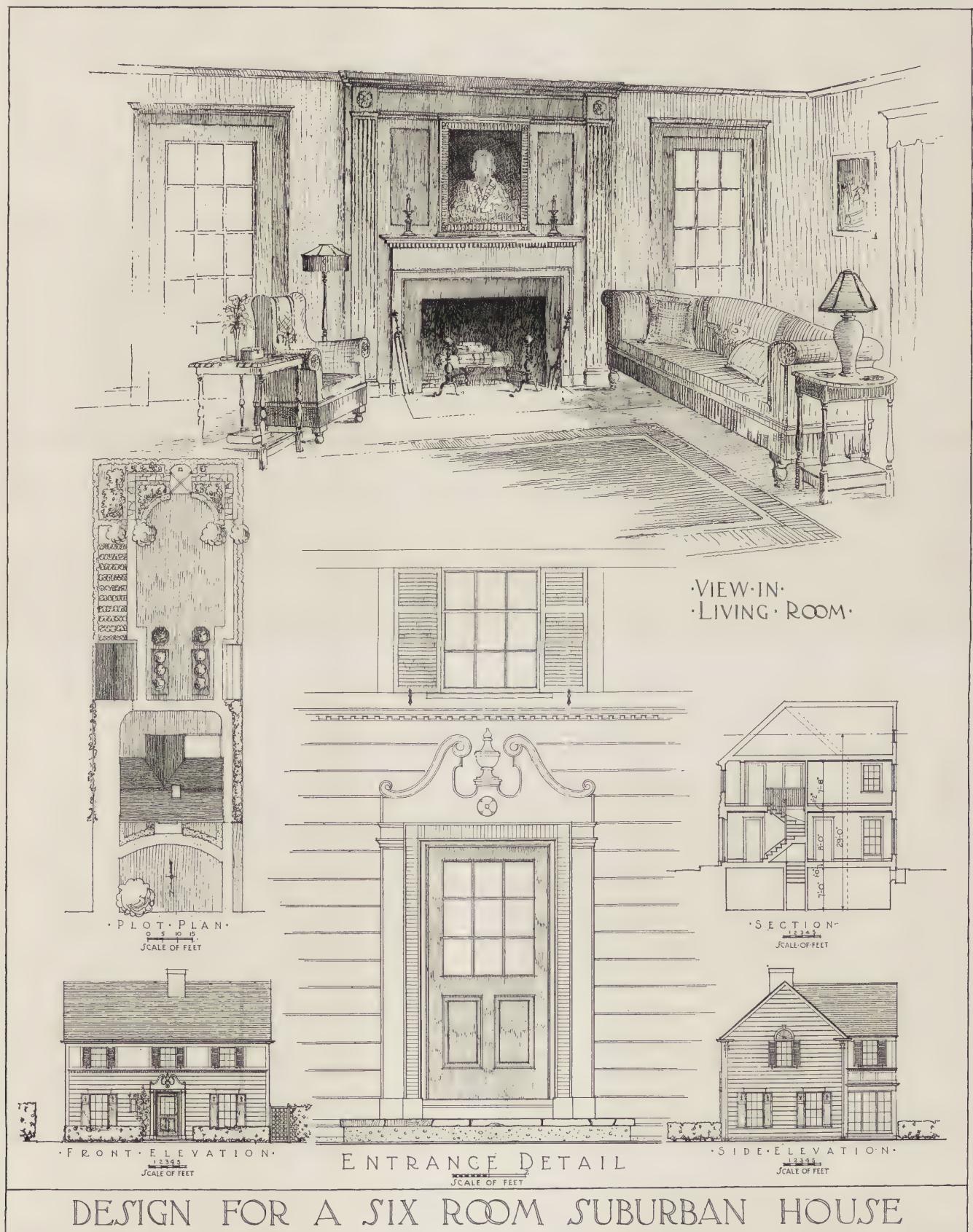


DESIGN FOR A SIX ROOM SUBURBAN HOUSE

MENTION, Design No. 52.

Submitted by Charles W. Cleary and James N. Holden, Boston, Massachusetts.

PENCIL POINTS



DESIGN FOR A SIX ROOM SUBURBAN HOUSE

MENTION, Design No. 52, Detail Sheet.

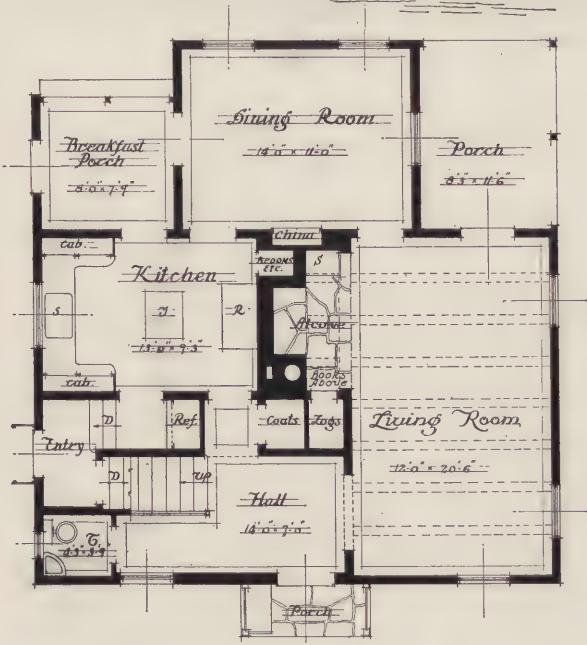
Submitted by Charles W. Cleary and James N. Holden, Boston, Massachusetts.

PENCIL POINTS

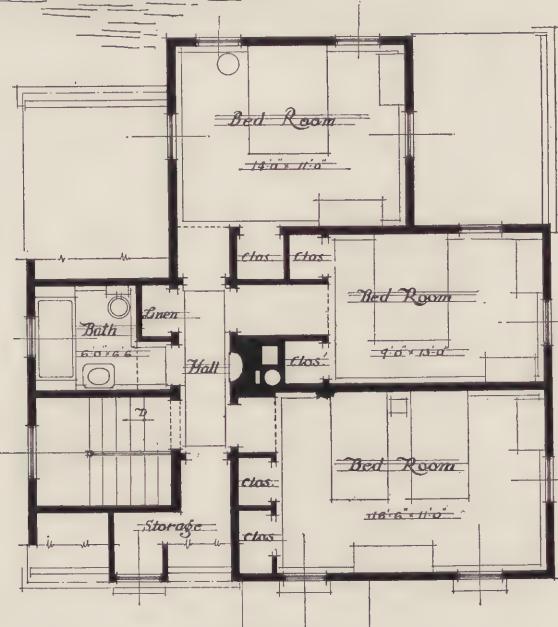


Cubage of Notes	
Body of house	32' x 21' 6" x 26'
Dorm Room Porch	4486 cuft
Gabled Room Porch	493 "
Breakfast Porch	620 "
Front Porch	70 "
TOTAL	23416 cuft

color scheme suggested - body of house painted white, Blue-green Shutters - Green Roof
location - Eastern & middle west section of U.S.



FIRST FLOOR PLAN
scale

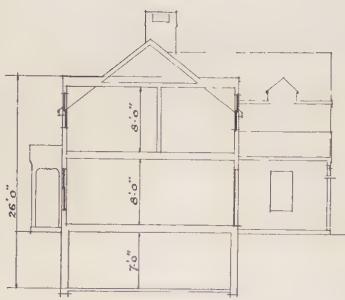
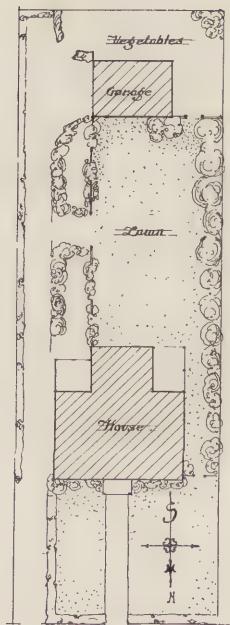


SECOND FLOOR PLAN
scale

Design for a SIX ROOM SUBURBAN HOUSE

MENTION, Design No. 99.
Submitted by Walter J. Thies, Dayton, Ohio.

PENCIL POINTS



Design for a
SIX ROOM SUBURBAN HOUSE

MENTION, Design No. 99, Detail Sheet.
Submitted by Walter J. Thies, Dayton, Ohio.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"About 175 works were shown at the annual spring exhibition, which was inaugurated on the morning of the 16th of May in the presence of the King of Italy, the American Ambassador and the members of the Academy. In the afternoon the exhibition was opened to the public and a program of the works of Randall Thompson and Winter Watts was given in the dining room of the main building. About three hundred guests attended the concert, which comprised a suite for piano and five odes of Horace for mixed chorus, by Randall Thompson; two Hawaiian songs, by Watts, were sung by Luigi Nardi. The Choir of San Salvatore in Lauro gave the odes of Horace under Thompson's direction.

"The distinguishing feature of the show was the display of one of Mr. Blashfield's executed mosaics, laid out on the Common Room floor. Lascari, who has this work in charge, showed portraits and figure compositions.

"We were unfortunate in being able to show only reproductions of Frank Schwarz's Anticoli triptych. The draftsmanship and disposition of the figures in the composition, as indicated in the photographs of the executed work and preliminary studies, attracted considerable attention.

"Floegel, senior painter, had a group of stained glass studies, frescoes, copies and studies of decorative details. Both sculptors, Stevens and Meyer, displayed busts, figures and small sculptures. Stevens had ten etchings not appearing on our catalogue. Antonio Di Filippo, visiting student in sculpture, contributed eight works.

"Norman T. Newton, landscape architect, showed among other drawings and sketches, three very fine renderings of his study of the Villa Medici in Florence.

"We were fortunate in receiving the news of the collaborative prize award in time to announce the winners to the public at the beginning of the exhibition. Messrs. Marceau, Bradford and Camden, architect, painter and sculptor, had the prize design, a memorial chapel. Marceau has twice been a member of a winning collaborative team.

"Paul Simpson, visiting student on the Le Brun scholarship, contributed fifty water colors and pencil sketches of unusual charm and Frederick Woodbridge, another visiting architect, showed five drawings of the restoration of a commercial building at Ostia and a restoration of a triumphal arch at Antiochi, Pisidia.

"Floegel, senior painter, is finishing the third-year composition, making further studies of stained glass, and he

recently requested permission of the Vatican authorities to study the frescoes in the Sistina Chapel in order to make a careful examination of the technical treatment of the compositions of the frieze.

"Stevens, senior sculptor, is having his standing figure, called Alba, cast in bronze. He has recently moved much of his work into storage space at the Academy to permit himself to move about more freely while finishing his group and relief.

"Newton, landscape architect, and Bradford, painter, are in Florence. Deam, architect, and Finley, painter, are traveling together in Spain. Douglas is busy with his restoration of the Temple of Dougga. Camden, sculptor, has his relief, a detail of his collaborative problem, in the process of "laying up."

18TH PARIS PRIZE AWARDED.

THE 18th Paris Prize of the Society of Beaux-Arts Architects has been awarded to Percival Goodman, pupil of George A. Licht and Jacques Carlu. The prize consists of \$3,000 which enables the winner to study for two and one half years at the *Ecole des Beaux Arts* in Paris. Noel L. Flint, student at Armour Institute of Technology, was Placed Second and Charles H. Dornbusch, Student at Princeton University and Columbia was Placed Third. These three men were awarded First Medals and \$100. Second Medals were awarded to C. E. Landefeld, student at Carnegie Institute of Technology, and J. Gambaro, student at Atelier Hirons and Princeton University. They also received \$100. The program called for "A Summer Capitol for the United States." An exhibition of the drawings was held at the Beaux-Arts Institute of Design, 126 East 75th Street, New York, from July 15th to July 25th. The Jury consisted of: Philip Allain Cusachs, Howard Greenley, John Mead Howells, William B. Ittner, C. Grant LaFarge, J. Lovell Little, Benjamin H. Marshall, H. Oothout Miliken, James Gamble Rogers, Henry R. Sedgwick and Whitney Warren.

THE NEW YORK ARCHITECTURAL CLUB, INC.

Architectural Bowling League Division

THE Architectural Bowling League of New York has fittingly brought to a close the eighteenth year of its existence on Monday evening, June 8th, with a dinner in honor of the Officers and the Executive Committee of the league for the past year, 'midst the quaint Old World atmosphere of the Hotel Brevoort, on the borders of our famous Bohemian "Village."

The festal gathering was engineered (or should professional loyalty compel us to say "architectured"?) by the masterly hand of Mr. M. L. J. Scheffer, our pinch hitter, and veteran of the league, as well as many a hard fought battle of gastronomical superintendence.

Following a general report on the league's standing in its business, financial and other activities, the President of the league, Mr. E. L. Capel, after thanking his fellow officers, the Executive Committee and, through them, the entire league for their staunch support during the past year, officially declared the termination in office of the 1924-25 officers and committee.

The election machinery was immediately set in motion, and the following were elected for 1925-26:

Officers

E. L. Capel	President
É. J. Burke	Vice-President
R. G. Hienerwald	2nd Vice-President
J. A. Finegan	Treasurer
H. Sasch	Secretary
A. F. Bernhard	Financial Secretary

Executive Committee

E. L. Capel	N. T. Valentine
E. J. Burke	G. A. Flanagan
R. G. Hienerwald	Charles Hess
J. A. Finegan	E. D. Thomas
H. N. Sasch	E. Weck
A. F. Bernhard	C. L. Elliott
G. R. Paradies	C. J. Jordan
H. G. Poll	P. Lynch, Membership Com.

D. Campbell—Publicity Committee

PENCIL POINTS

The Architectural Bowling League has decided to bowl on Joseph Thum's White Elephant alleys the coming season, and arrangements have been made for the use of 11 alleys every Thursday night, beginning the latter part of September or the first part of October, and continuing until the end of the bowling season next May. All friends of the league and club, as well as fellow draftsmen, who are not members of either, are hereby cordially invited to drop in and visit with us on these nights (and that includes the other 75% as well. Bring her along by all means.).

At this writing the following offices have made requests for participation in the coming tournaments:

Cass Gilbert	Andrew J. Thomas
Donn Barber	Kohn & Butler
Alfred C. Bossom	Peabody, Wilson & Brown
McKenzie, Voorhees & Gmelin	J. E. R. Carpenter
Warren & Wetmore	York & Sawyer
McKim, Mead & White	Schultz & Weaver
James Gamble Rogers	Holmes & Winslow
Thomas W. Lamb	Shape, Bready & Peterkin
Guilbert & Betelle	W. L. Stoddart
Starrett & Van Vleck	Benjamin W. Morris
Schwartz & Gross	John Russell Pope

With business details and congratulations in the background, the gathering advanced upon the refreshments provided for the occasion. All present enjoyed themselves unrestrainedly, with the assistance of the very able talent engaged for the ceremonies, for the balance of the evening.

It was noted that the main topic of discussion was the new ARCHITECTURAL CLUB, and since we must remember that the league is really the parent of the club, it is not surprising in the least that the league assumes the proverbial protecting attitude of the father for his natural offspring, and true to form with all good fathers it waxes enthusiastic in its pride for, and the future glory of the CLUB, which is showing such surprising energy and growing by leaps and bounds. *THE CLUB IS HERE, AND THE CLUB WILL STAY.* Hence the enthusiasm. But more about that in the next issue. Besides, we are encroaching on other domains.

HENRY SASCH,
Secretary.

JUDGES FOR ORNAMENTAL IRON COMPETITION

THE competition for designs of ornamental iron work, as announced on another page of this issue, will be judged by the following jury: Dwight James Baum, New York; W. M. Buchroeder, Richmond, Va.; Frank H. Quinby, New York; C. Weiler, New York; and Samuel Yellin, Philadelphia.



Atelier of the Architectural Sketch Club of Chicago.



PERCIVAL GOODMAN

PERCIVAL GOODMAN, winner of the Eighteenth Paris Prize, was born in New York and received his early education under private tutelage. His architectural training began in the office of his uncle, Mr. Benj. W. Levitan, Architect, New York, under whom Mr. Goodman worked for a number of years. He was later employed in the office of John B. Peterkin. During this time he attended the Fontainebleau School of Fine Arts for American Students where he received instruction from M. Jacques Carlu. Mr. Goodman feels that he owes much to Mr. Geo. A. Licht, in whose atelier he has worked, M. Jacques Carlu, Mr. John Peterkin and Mr. David Varon. Mr. Goodman will sail for Paris shortly where he is planning to enter the Atelier Pontremoli.

THE ARCHITECTURAL SKETCH CLUB OF CHICAGO

THE Architectural Sketch Club of Chicago realized its long cherished dream when its new home at 1801 So. Prairie Avenue was officially opened with a great house-warming party. Some seventy-five members and guests turned out in response to the invitations sent out by fellow members, Mr. Robert L. Minkus and Mr. Paul J. McGrath. A reproduction of the announcement sent out is published on page 96.

The party started off with a royal dinner set out by Mr. Sayles, our resident manager. Following the dinner the guidance of the future welfare of the Club was entrusted into the hands of Mr. Robert L. Dando, who will officiate as president and who will be ably assisted by a very capable line-up of fellow-officers and directors.

Among those present was Mr. Ted Hoffmeister, who early in the evening showed great indications of publicly addressing the assembly. As the youthful evening aged Mr. Hoffmeister's urge greatly increased, with the result that finally he did arise and address the assembled mob in a very informal and humorous vein. Ted is the holder of the Foreign Traveling Scholarship of 1925 and he discussed his plans for his trip abroad. After the applause following Ted's address had subsided, the party adjourned to the Atelier where the balance of the evening's program was enjoyed. The committee had some sterling entertainment scheduled in the forms of some "femmes très charmant," who did very well in furthering along the aging of the evening and who helped discover quite a few of our members who are very adept in tripping the light fantastic.

PENCIL POINTS



Announcement sent out by the Architectural Sketch Club of Chicago.

All these events helped immensely to infuse our new home with a warm glow and we hope that it may stay warm for many a year to come. A photo of our Atelier is published on page 95.

Following is a list of the personnel of the new régime under whose guidance the Architectural Sketch Club of Chicago will be for the next year.

President, Robert E. Dando
Vice-President, George M. Nedved
Secretary, Edmond J. Ryan
Treasurer, Gerald A. Bradbury
Directors

Directors
Active 2 years, Pierre Blouke
Active 1 year, Clarence W. Farrier
Associate 1 year, William F. Thomsen
Active 2 years, Rudolph Nedved
Active 1 year, Paul J. McGrath
Associate 1 year, Charles H. Siersks

As a final *adieu* to the old quarters of the Club, the Program Committee staged the 1925 scholarship competition *en loge* in the old quarters, on April 26th, and it certainly was a busy and industrious place.

There were nine competitors very energetically pushing the pencils and slinging ink on the final day.

The subject of the competition this year was "An Air Line Station," which was to be designed to accommodate the future mode of transportation which will be by aeroplane.

Messrs. Rupinski, Ryan, Nicolai, Hoffmeister, Ahlson, Dando, Fuhrer, Schweiker and Walden all submitted final drawings.

An innovation in the program this year was the requirement that all "calques" were to be brought into the Club quarters and all final drawings completed in the Atelier en loge.

The competition was open to all members and non-members in the City of Chicago.

The judgment of the final drawings took place on May 2nd, at the Art Institute of Chicago.

The jury was composed of Mr. Raymond Hood, Chairman, Mr. Edward Bennett, Mr. Shaw and Mr. Hall.

the jury made the following awards:

Mr. Ted Hoffmeister—1st prize
Mr. Fred Ahlson—1st Mention Placed 2nd
Mr. Eugene Fuhrer—1st Mention Placed 3rd
Mr. Edward Rupenski—1st Mention
Mr. F. Nicolai—2nd Mention

The winner, Mr. Hoffmeister, is now completing his itinerary and more complete information as to his plans will be announced later.

THE building plans for the Sesquicentennial International Exposition are being made by John Molter, City Architect of Philadelphia. The exposition will be held in Philadelphia in 1926 to celebrate the 150th anniversary of American Independence.

A SIX ROOM SUBURBAN HOUSE

(Continued from page 69)

Possibly the worst criticism could be in regard to running the roof lines so low along the south side as to largely cut off the benefit of southern exposure in the two bed rooms. There is also, of course, no view obtainable toward the front of the house from the living room; and the hall wastes more space than is desirable. Nevertheless, it remains an interesting composition,—and, granting the premises adopted in judging the first prize design, a perfectly logical solution for this type of lot; the entire width of the house being but 28 feet over all.

In conclusion, the judges would regard the present competition as being unusually successful in the results that it has brought out,—and believe that those who were responsible for inaugurating the contest should feel well repaid for the unusually high character achieved by the contestants' drawings, as a whole. If anything is lacking, it was in the somewhat monotonous use that was made of conventional or "usual" colonial precedent in the exterior designs of these six-room dwellings. More original treatments; and ones based on less limited precedent, would have been welcomed. If, in the event of another competition being undertaken, it would be possible to so frame the program as to encourage the contestants to undertake to devise more original treatments,—or to force them to less well established and less formal models for their designs, it would perhaps produce a more interesting and original group of houses. Nevertheless, the judges, in finally reviewing the results of their efforts, could not but feel that the competition had resulted in producing an interesting and varied assortment of designs; and that, whether or not all the contestants or readers of this report may agree entirely with the selections made, they cannot help but acknowledge that the twelve houses selected finally by the Jury are, without doubt, practicable and "buildable" designs, any one of which, if erected in appropriate surroundings, would do credit to the judgment and taste of its owner and occupants.

The members of the Jury also hope, that all students of this competition will agree with them in the belief that they have conscientiously studied the entire problem with open minds, allowing themselves to be attracted and interested by any practicable and promising solution,—and that they have been able to escape from falling an easy prey to the engaging and insinuatingly attractive perspective, that so often fools the spectator on first glance—and has been even known, upon occasion, to be equally successful in fooling the competition Jury!

In this case the members of the Jury were all agreed that it was the buildable house that they wanted to discover and encourage, with practicability of plan, and originality of design, if possible; but they were unanimous in the belief that the architectural solution, rather than the pictorial presentation, was the one to be sought out and encouraged; that architecture was more a matter of understanding of structural requirements and materials, along with a certain amount of knowledge of the alphabets and formulae of styles, than a mere matter of craftsmanship; and so it was along that way they endeavored to find and bring forward an ideal solution of the "six-room house problem," knowing that so much of the future health and happiness of the race depends upon the discovery and use of such happy "ideals," once they may be discovered and brought to a wide acceptance and general appreciation by the larger part of the American public!

Respectfully submitted,

FRANK CHOUTEAU BROWN,
Chairman.
LAURENCE HALL FOWLER
LEON N. GILLETTE
CARL A. ZIEGLER

CORRECTING A MISTAKE

THE American Face Brick Association keenly regrets an error which appeared in their advertisement published in the July issue of this paper.

St. Paul's M. E. Church, South, Clarksburg, West Va., was designed by Mr. C. H. Snider, architect, Fairmont, West Va., to whom credit should have been given.

PENCIL POINTS



N. J. SAPIENZA

N. J. SAPIENZA, winner of one of the special Student Scholarships at Massachusetts Institute of Technology for 1925-26, was born in New York City, July 1, 1903. He obtained his early education at a parochial school and graduated from the New York Evening High School in 1920. He then attended Cooper Union for several years, completing the course in 1924. Since then he has been doing *Beaux-Arts* work in the Atelier Hirons, receiving several mentions and one first mention placed during the past year.

Mr. Sapienza is at present in the office of W. P. McCarthy & F. E. Kelly, A.I.A., of New York and Philadelphia, to whom he is indebted for their encouragement in continuing his *Beaux-Art* work and competing for the M.I.T. prize. He also feels that he has received a great deal of help and inspiration from his associations in the Atelier Hirons.

THE IDEAL CELLAR COMPETITION

EVERY architect or draftsman is invited to enter this Ideal Cellar Competition which is being conducted by *The Architectural Forum* for the American Radiator Company. The prizes are as follows:

Grand Prize: \$1,000

First Prize: Class A, \$500; Class B, \$500

Second Prize: Class A, \$300; Class B, \$300

Third Prize: Class A, \$200; Class B, \$200

Fourth Prize: Class A, \$100; Class B, \$100

10 Mentions: Class A (each), \$50; Class B (each), \$50

The competition closes at 12 o'clock noon, August 25th, 1925. For complete information write to the American Radiator Company, 40 West 40th St., New York City.

COMPETITION FOR GARAGE DESIGNS

THE Steel Trade Extension Committee, as announced more fully on another page of this issue, is offering prizes aggregating \$1,000 for designs submitted on or before October 20th, 1925, in accordance with the terms of the program prepared by the professional advisor, Edward B. Lee, Architect, 1210 Chamber of Commerce Bldg., Pittsburgh, Pa. Entry blanks for the competition, copy of program and complete information may be secured from Mr. Lee.

ARCHITECTURAL DESIGNER WANTED

THE California State Civil Service Commission will hold an examination for the position of Architectural Designer, Bureau of Architecture, State Department of Public Works, San Francisco. The salary for this position ranges from \$285 to \$350 a month.

The examination is open to all American citizens in good physical condition between twenty-one and sixty-one years of age.

Applicants must have graduated with a degree from an institution of recognized standing with major work in architecture, and must have had not less than five years of general architectural experience, of which at least one year shall have been in the direction or performance of important architectural work. They must also possess supervisory or administrative ability or a high degree of technical skill. In the absence of such a degree at least four years of additional general architectural experience will be required. The completion of each full year of such course shall be considered the equivalent of one year of such additional experience.

The duties of this position are under general administrative and technical direction to exercise independent architectural judgment and assume responsibilities in studies and computations necessary for the preparation of designs and estimates; to design and plan important buildings and groups of institutional buildings, etc.

Application blanks and complete information may be obtained from the State Civil Service Commission, Room 331, Forum Bldg., Sacramento, Cal.



Design by N. J. Sapienza, which was awarded one of the special Student Scholarships at M. I. T.

Sketches by Herbert Kates.



COMMENTS ON "SUBSTITUTION."

To the Editor of PENCIL POINTS.

Dear Sir:—

In connection with your article on "Substitution" in the July issue, the entire discussion apparently hinges around the words "or equal." Personally, the writer is a believer in the elimination of these words in specifications. I believe they were originally inserted purely in the interest of keeping down the cost of a building. It served two purposes, in a way, one to allow the contractor to use his discretion in furnishing something he might consider equal and also allowing a concern to bid on their product if they consider it equal to the one specified. The contractor would, naturally, take the lowest he could find and the concern furnishing would quote the lowest, but in this day of competition, why not eliminate these words "or equal?" They are causing a great deal of trouble.

According to a recent legal decision published in one of the architectural publications, an owner refused to pay the contractor because he maintained a substitution of materials had been made. The architect approved the substitution on the strength of the words "or equal," but the court upheld the owner. Now, if the words "or equal" are in there even though an architect does approve a substitution, he has got to safe-guard himself and secure the approval of the owner in writing, according to this decision.

The contractors today are certainly keen after business and the proper selection of contractors assures a good bid. I believe there is a closer harmony between the architect and the contractors today so that if a contractor finds that a certain concern is jacking-up their price because they were specified outright, I believe the architect would welcome such information and a suggestion of a substitution by the contractor at the time of his bidding. The merits of the substitution can be looked into by the Architect, but it would be to the interest of the contractor to make note of the above.

You suggest also, a closer supervision by the architect and more firmness on his part to insist that the materials specified go into the building. This certainly is true. To this I would add that some of this firmness should be exercised so as to discourage some of these "or equal determined salesmen" who walk into the office and all but persuade you that the building will fall down with the material specified and their's is the only thing that will save it.

As to the architect selecting his own contractor, this is most satisfactory and architects dream of the day when they can do this. Still, we all have to realize that the owner is the man spending the money, therefore, he has the right to say who he wants to build just as much as he has to select his architect. I am frank to say that even though the owner may insist upon a contractor whom an architect may know has a reputation that is not the best, there is no excuse for the architect to use such information for letting the contractor get away with something and then blaming the owner. The owner is paying the architect for protection, regardless of who builds the building and it is up to the architect to see that he gets what is specified.

There is another side that can be of assistance and which some concerns are adopting and that is, that the manufacturer, instead of trying to pick out places where-in he is not specified and trying to convince those people they haven't the best product, he should select the specifications wherein he is specified and see that the contractor, who is awarded the job, purchases his material, notifying the architect in such a case. I am sure an architect would appreciate such a service.

The practice today is almost becoming unbearable, due to the keen competition. If you specify a certain material, regardless of whether the words "or equal" are used or not, you have one after the other coming into the office with all kinds of products. Some of these are real good salesmen and can almost make an architect feel that he has made a horrible mistake by specifying anything but the material they represent. As a tip to others, I make it a practice of never approving a manufacturer's article through one of his representatives. I have found a great many of these salesmen do not stay with a concern and sometimes are not very conscientious about what they guarantee. Therefore, we always refer them to the contractor, having the contractor make requests for a substitution, stating why. A great many

times a contractor has had experience with the material and if he hasn't, he, as well as the architect, can investigate the matter further.

Yours very truly,
Aaron G. Alexander.

Editor,

Dear Sir:

Specifications requiring certain materials or equal are absolutely logical and good business where the words "or equal" are properly used. It is foolish for an architect to sit tight and allow no substitutions where the excellence of the work is not affected. The number of substitutions possible to make on a building is not great in any case and with ordinary supervision, unauthorized substitutions, so far as my experience goes, are few. Requests for substitutions are frequent, but these come not so much from contractors as from salesmen in various lines who naturally wish to dispose of their goods.

Complaint is made that materials specified are not always used on the work. This complaint is valid only in part. Where the specification concerns materials such as Portland cement, lead and oil paint and the like, which may be specified by name, the manufacturer should not depend wholly upon the fact that his particular manufacture is specified, but see to it that he sells the job.

My experience is that contractors prefer to work according to specifications, where little or no difference obtains between them and what might be substituted. Where substitutions are of advantage to them a request is forthcoming and very seldom do they attempt to substitute without approval, taking the risk of rejection of work into account.

The most common source of trouble is not substitution of materials, but of subcontractors. Here price rules the selection and incompetent workmen and unreliable subcontractors combine to spoil perfectly good materials. If it were possible to require a statement in bids of subcontractors proposed, an architect would have a better basis for predicting good results. Here the words "or equal" would have a meaning and substitution should not be permitted without notice.

Hoping these few words will find you enjoying the same summer weather as here, I am

Very truly yours,
(Sgd.) Arthur Peabody, State Architect,
Madison, Wisconsin.

The Pencil Points Press, Inc.,
New York, N. Y.
Gentlemen:—

The writer has with much interest read your editorial in the July issue of PENCIL POINTS entitled "Substitution".

It, undoubtedly, presents to your readers, in a practical way, a subject that must be of unusual importance.

Certainly, it is interesting to the manufacturer of quality material used in the building industry, and, certainly, it should be of interest to the architect as well as the client.

Definiteness in all matters pertaining to building construction brings the most satisfaction.

If the architect, at the very beginning, sells his ability and his integrity to the client, then, this ability and this integrity become a part of the plan, a part of the specifications, a part of the construction work, and, lastly, a part of the building itself.

If the architect lacks definiteness in deciding upon the material to be used, it makes a vacillating client, and introduces discussions regarding what and how and when, and this ends in an unsatisfactory job.

Procrastination, the thief of time, in a building operation where there are gathered together an architect and a client and numerous building trades, becomes also the thief of money, because it largely increases the number of hours that all parties concerned must give to the operation in question. This item alone, undoubtedly, would more than pay for a competent clerk of the works.

The chief difficulty then, is to find a way to reimburse the architect for the time that he must take to see that the material determined upon and specified is actually used in the building.

That the architect should be adequately paid, for complete supervision, goes without question.

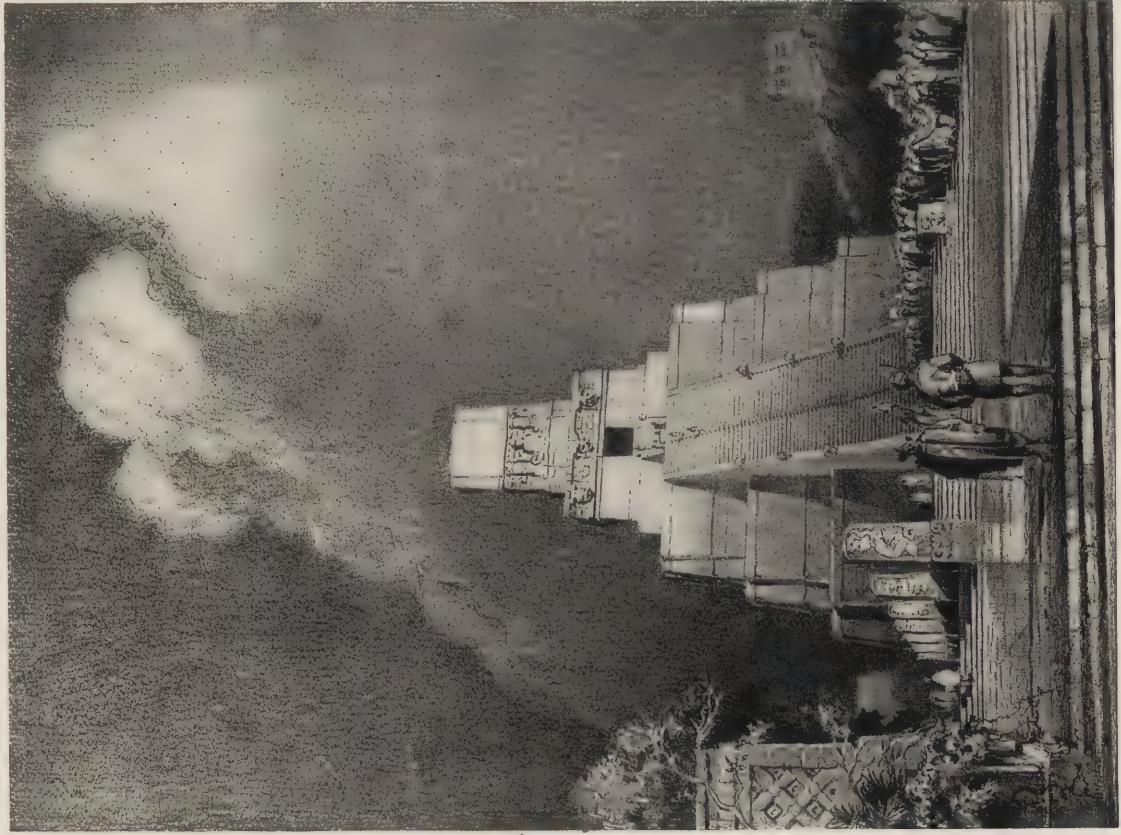
That adequate supervision would in the end be beneficial to the client, financially and otherwise, and to the industry in general, we also believe is unquestioned.

(Continued on page 113)

Pyramid at Tikal, Guatemala.



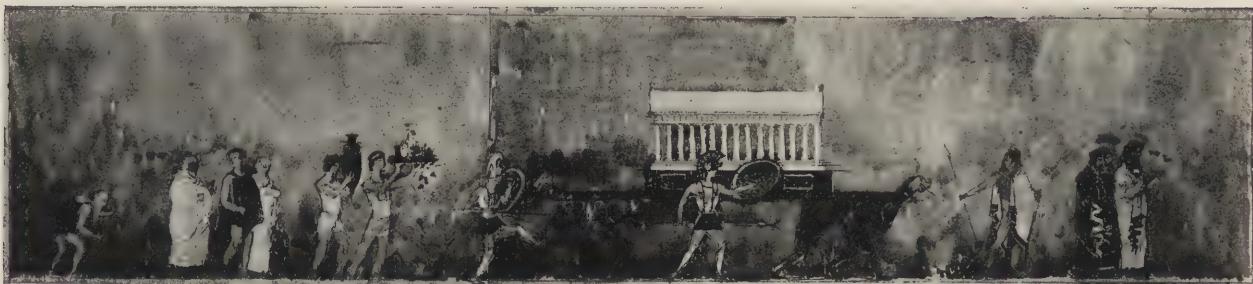
Restoration of the Great Pyramid at Tikal, by Alfred C. Bossom.





Thirty-five Story Building after Primitive American Motives, Alfred C. Bossom, Architect.
Mr. Bossom shows in this design an application to present-day conditions of his study of
the Great Pyramid at Tikal, shown on the opposite page.

PENCIL POINTS



Drawing by A. L. Kundzin. Greek Pageant Given by the Arts Club, Washington, D. C.

THE MAKING OF A MODEL OF THE PARTHENON FOR A PAGEANT

THE very artistic Greek pageant given at the Bal Böhème of the Arts Club of Washington featured Ictinus' and his fellow craftsmen's submission of a model of the Parthenon to Pericles for his approval. The representation was carried out by means of a large model of that historic building and the architect and his assistants, the slave porters, and attendant soldiers were represented by members of the Washington Chapter of the American Institute of Architects and the architectural students of George Washington University. The model was made solely for this occasion and its construction may prove of interest to the general reader and furnish information to those having similar problems.

The restriction as to weight and limitations of transportation demanded considerable study. As the ball room was large and the procession of some length, the actual size of the model had to be considerable. It had to be carried some distance on the shoulders of the slaves of the evening, and had to be light in weight. As it was a most temporary performance, its cost in material and labor had to be light. The cheapest, strongest, and most available material was beaver board, but the problem of the columns, the most prominent characteristic of the design, was most difficult. To have them turned in wood or cast in plaster would have increased the weight so much that rapid handling would have been impossible. Paper mailing tubes were decided upon as the proper material. How to give the necessary entasis and secure the columns was the next problem. It was finally solved by cutting a V-shaped slot down the greater part of one side of the tube columns. By inserting the top in a pattern, to insure all of the top diameters being the same, the spring of the cardboard formed the entasis, and the two sides were then secured by gummed paper. The capitals were cast in plaster with bottom lugs the size of the top diameters and slipped in place when the model was assembled. The type and size of column having been determined by the material at hand—the size of the mailing tube determining the module,—drawings for the building were laid out with the aid of "Buhlman." The total length of the building was six feet, the supporting box some ten feet long.

As the elevators of the ball room limited the sizes of the parts, it was finally planned to prepare the model in four sections; first the box, or podium, on which the paper structure rested (this was made in two parts as the total length was ten feet); second, the stylobate and steps in a single piece, with wood circular blocks for securing the bases of the columns, glued in place; third, the cella constructed intact and extended up to the roof forming the chief structural or supporting member; fourth, the entablature, pediments and roof made in a single unit and the plaster capitals secured to this piece. This was a mistake, they should have been secured to the card board column shaft. The cross braces of the roof were let down into the walls of the cella, but the final assembling was handicapped by the roof having been glued on. It should have been omitted during construction and secured only after the model was completely assembled.

The box or base mentioned was made in two parts, of compo board, as illustrated in the sketch on the opposite

page, and was spliced together at the ball room. On this rested the stylobate constructed of the same material. The steps, however, were made of wood strips cut to the proper size. On this stylobate were drawn all the necessary axes and construction lines and of these it was found there could not be too many. This drawing of construction lines and axes was carried out in the entablature, both face and soffit, carried up through the frieze and on the roof surfaces which facilitated the assembling and were of value up to the moment of painting. The cross braces of the roof were let down into the cella walls as mentioned, but failed to be fastened laterally, on account of inaccessibility, a warning which the final result warrants being given here.

The columns and cella and all parts not easily accessible were painted in the studio and a single light coat given the remainder, and the final coats "on the job," for experience proves nothing can be moved without finger marks or chafing scars. The base was painted a grey tone (with a flat quick-drying wall paint), the columns graded up from grey to buff and the entablature and roof a warm ivory tint. The plaster capitals were left white. The model was carried upon a stand with short legs. To this stand was secured the carrying handles 16 feet long, spliced in the middle, and was attractively draped with Pompeian red fabric with green garlands hung between each bearer position. The legs were simply toenailed to the handling bars and cross braced. After the model was finally assembled, it was lifted to the carrying stand and on the slippery dancing floor the stand skidded and the finished model dropped three feet. This tore out practically all of the glued base blocks. A few minutes' work, however, brought all the displaced parts in place, but the roof being secured prevented the cross bracing being again securely fastened to the cella walls, so after the jar, the entire weight of the roof came upon the columns.

The night of the pageant came. The bearers carefully lifted the model to their shoulders, the procession formed, the pageant moved. The presentation ceremonies were over; the bearers and the model passed into the anteroom. One side was lowered too quickly, and so struck the floor heavily. Slowly the model collapsed and the wreck was a more complete one than the historic explosion made of the original building. Tremendous applause marked the desire for an encore, but the ruined model forbade it. So this brief description serves both as an example and a warning.

—William Partridge.

Right—Finished Column with Cap.



PENCIL POINTS



Columns for the Model of the Parthenon Constructed from Mailing Tubes

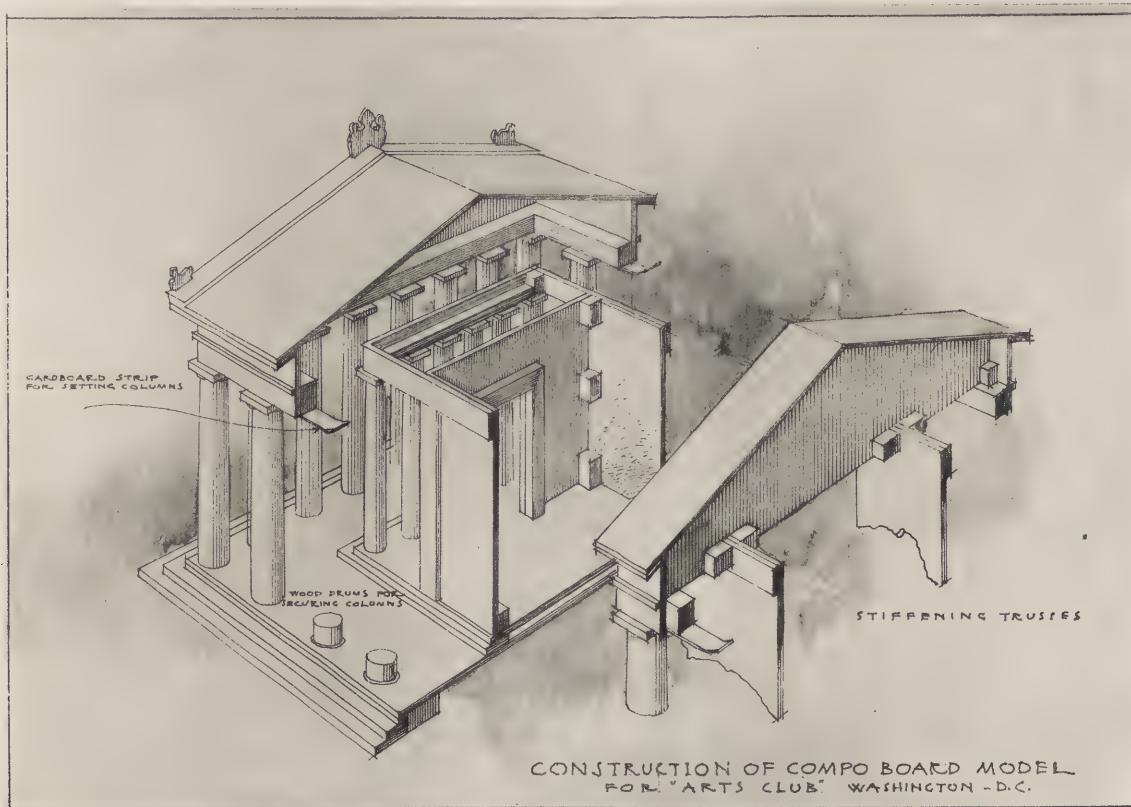
THE PENCIL GUILD

THE members of the office of J. Williams Beal, Sons, of Boston, have recently formed The Pencil Guild, an organization to be devoted to the furtherance of their professional and social interests. The activities of The Guild will include visits to work under construction and completed jobs in order to profit by a comparison of the effect of the executed work with the drawings, and the inspection of building material plants to study the best uses of materials. On the social side there are planned monthly luncheons to be addressed by speakers of prominence, and occasional excursions in which wives and friends will participate.

Enthusiasm for the future runs high, especially as the organization's brief existence already counts a highly successful banquet at the Boston Architectural Club and an all day outing which included visiting several buildings and a lobster dinner to mark the transition to an afternoon of ball-playing, swimming, and dancing. Plans are already completed for a lively initiation of new members and a trip to New Hampshire. Something always in the offing is the scheme of things.

Officers elected are as follows: President, Lloyd M. Hendrick, Jr.; Vice-President, Victor R. Provost; Secretary-Treasurer, F. Leslie Ford. Social activities will be in charge of a committee consisting of Thomas F. Bundy, John A. Bigelow and Charles W. Jones. The professional phases of the Guild's work will be cared for by a committee composed of William E. Thompson, Jr., Frederick C. Rau, and Robert T. Gidley.

Victor Pedrotti has returned to New York and taken up his residence at 136 MacDougal Street. Since decorating "The Mill", the interior of which was shown in the January issue of this magazine, Mr. Pedrotti has carried out interesting decorative treatments at 236 West 56th Street, and at the "Club Inspiration". Mr. Pedrotti's spirited decorations are executed with freedom and ease and are highly effective.



Construction of Compo Board Model of the Parthenon used in the Pageant given by the Arts Club, Washington, D. C.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

HERE we are again, back on the old treadmill! The members of the Pittsburgh Architectural Club strutted their stuff in grand style in our July issue and so far as we can judge, from reports already in hand, everybody who is not on his way to Florida is planning to move to Pittsburgh, now that it has been made clear to all and sundry that all the days are sunny and that the stories of Pittsburgh weather are no more true than the accounts of strange doings in Winsted, Conn. But the other Clubs have fallen down, down, down. We thought to get out of our summer stent by inviting someone else to do the work. It didn't work! —So once more we have marshalled our paste pot, our scissors and our secretary so that this famed forum of fun may not fade entirely ere succor arrives.

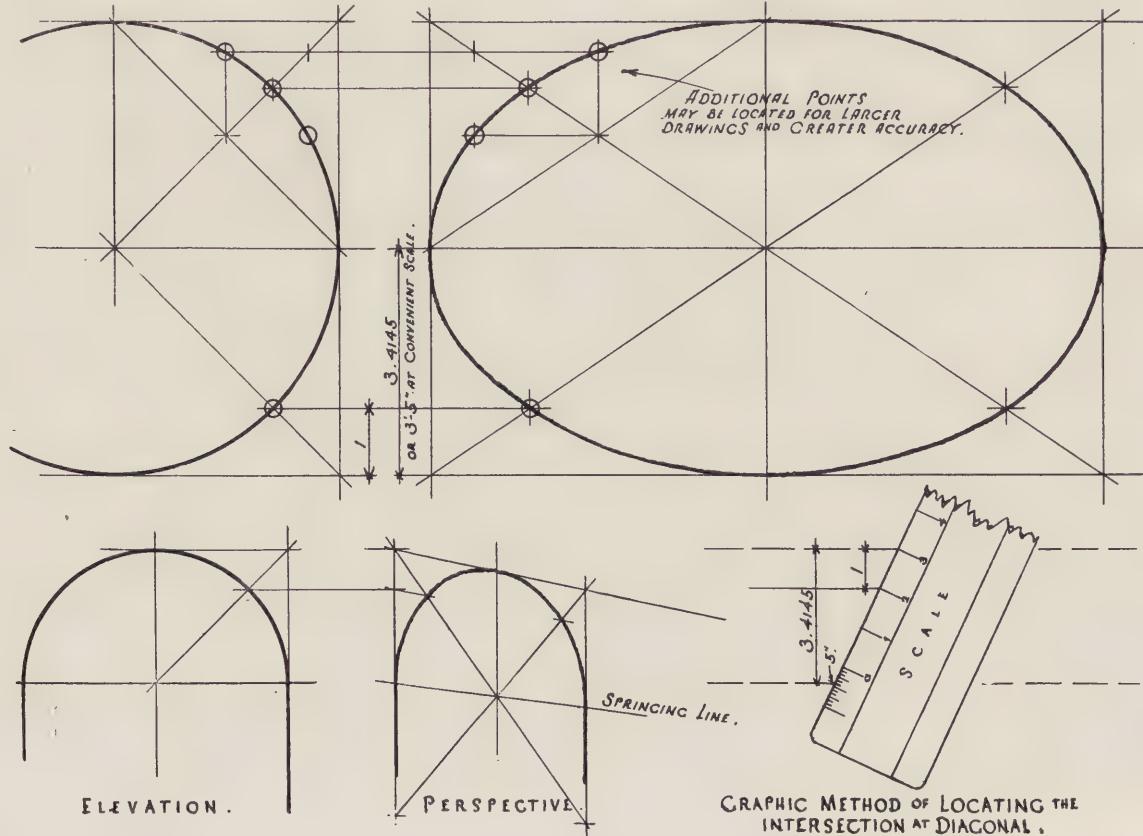
We have oiled up our spy-glass and are scanning the horizon anxiously for the next victim. Wouldn't you think that the Architectural Club of Los Angeles, or Chicago or St. Louis, or somewhere or anywhere else, would jump at this chance to get four pages of nice white space in PENCIL POINTS to do with according to their whims? The answer is, we would. Every club and atelier has the talent to produce four resounding and melodious pages of sketches, verse, summer foolishness or what not! Write your own ticket and compound your own ingredients in such fashion as pleases you best. Surely all the enterprise and pep is not confined to Pittsburgh, enterprising and peppy as those fellows surely are, and have proved themselves to be. Remember, we make all the engravings. Just send in your rough material (not too rough) and we will do the rest.

RUDOLPH J. NEDVED recently gave a very interesting illustrated talk before the Architectural Sketch Club of Chicago on his travels in Europe. He exhibited, in addition to his lantern slides, about 50 sketches and rubbings of some of the high spots of his trip. Judging from the very high quality of these, Mr. Nedved's spare time must have been very energetically employed.

Mr. Nedved won the Foreign Traveling Scholarship of 1924. While in London he decided to join forces with a fellow student of architecture, with the result that now there is a Mrs. Nedved—Mrs. Elizabeth Kimball Nedved, one of whose water colors is reproduced on page 107.

R. W. R., Sir:—Add events leading to tragedy,—this persistent parade of synthetic ellipses. Why not such a circle? Both are similar, for given the major and minor axes, the line of circumference for an ellipse can not vary; neither the circle,—the radius of which is its comprehensive description. Substitution of linked or annealed various arcs can never satisfy the normal eye, and why deal them? Strange to say most of these aberrations spring from "Ingeniers", hard baked for accuracy we would think. Thus the circle is ever the control, and the ellipse is always so governed. In hope of random assault on arches as perpetrated by some of our greats in "perspective", here is the same truth for proper construction of the semi-circular; any other variety we shall be happy to illustrate in outline. Doping out a way of drawing an ellipse instrumentally with compasses is a sport for an asylum for the semi-conscious. However, there is an elaborate apparatus on the market, which we think does the trick.

Gregory Parable, A.I.A.



This diagram, sent to us by Gregory Parable, is explained above.

PENCIL POINTS



Water Color Sketch by E. W. Drury, New York, Fountain in Taormina, Sicily.

Mr. Luis Canedo Gerard, Apartado No. 4 Bis, Mexico City, Mexico, is anxious to secure a copy of the November 1924 issue of PENCIL POINTS to complete his files.

WE BEG TO ANNOUNCE



THE RENAISSANCE of the... ARCHITECTURAL CLUB

At the last regular monthly meeting of the Club, held several months ago, your esteemed Vice President was asked to take charge of the meeting and with the greatest enthusiasm and ability he reported at the meeting to find three members present out of an unpaid membership of 97,454. He has been steadily planning his revenge ever since, and now at last we call the Electors of President Garibaldi for Europe, the event opportunity has come. A committee of expert wreckers has been appointed for the occasion.

We are now prepared to officially bury the Architectural Club in broad and ancient, yet dignified, style and we invite you to be present at the funeral.

Entertainment Par Excellence! Dancing, Singing and other annoying Diversions. Frivolous and Funny, Rapid, Riotous and Risqué

RAVISHING HARUM BEAUTIES

Dancing Women, Singing Women, Wild Women, Etc., Etc., Etc.

There Will Also Be:

NO BUSINESS! NO SPEECHES!

NO READING OF MINUTES!

NO REFERENCE TO ARCHITECTURE OR ALLIED SUBJECTS!

(We had Garmy Shanghaied to Europe to make this Promise Safe)



SPECIAL ADDED ATTRACTION
A 3 HOUR TALK ON EXCAVATING—ILLUSTRATED WITH STEAM SHOVELS.
By a Man who has wrecked many Architectural Clubs.

The Following Distinguished Guests will be Present:

Smith Brothers Meyer & Holler Lydia Pinkham

Luther T. Mayo Foreman & Clark Volstead

DON'T MISS THIS!

EVERYBODY WELCOME!

Bring Your Friends—This is not Restricted to Club Members.

NO RESTRAINT TO YOUR BEHAVIOR

BASKET PARTIES WELCOME BODIES CALLED FOR AND DELIVERED

POLICE AMBULANCE IN ATTENDANCE

ALL THE COMFORTS OF HOME—WITHOUT THE EXPLANATIONS!

AND LAST BUT NOT LEAST A WONDERFUL PARISIAN DINNER

Noiseless, comfortable, agreeable, hygienic, palatable, satisfying, delicious, everything

Satisfactory or Your Money Back

Tuesday, June 30th, 6:30 CRYSTAL PALACE FRENCH CAFE

110½ SO. SPRING STREET

(Down in the Cellar)

PRICE \$1.50—INCLUDING AMBULANCE RIDE AND BED IN RECEIVING HOSPITAL

TRY TO GET IN—THEN TRY TO GET OUT!

EVERYBODY WELCOME!

SELF APPOINTED COMMITTEE
WALTER DAVIS, F. D. S. L. A.
TALMADGE, R. D. M. R. O. C. K.
GUS HALE, L. L. C. C. C.
HARRY ADAMS, F. O. R. E. O. U. C. H.

CARNEY'S GONE TO EUROPE, BOORAY, BOORAY!

THE TREASURY'S FULL OF MONEY, NOW WE CAN PLAY!

Los Angeles Architectural Club.

Mr. Herman Lewis Bodmer, 3675 Park Boulevard, San Diego, Cal., has for sale the following copies of Pencil Points: 1922—Sept., Oct., Nov., Dec.; 1923—Complete; 1924—Complete; 1925—Jan., Feb., May & June.

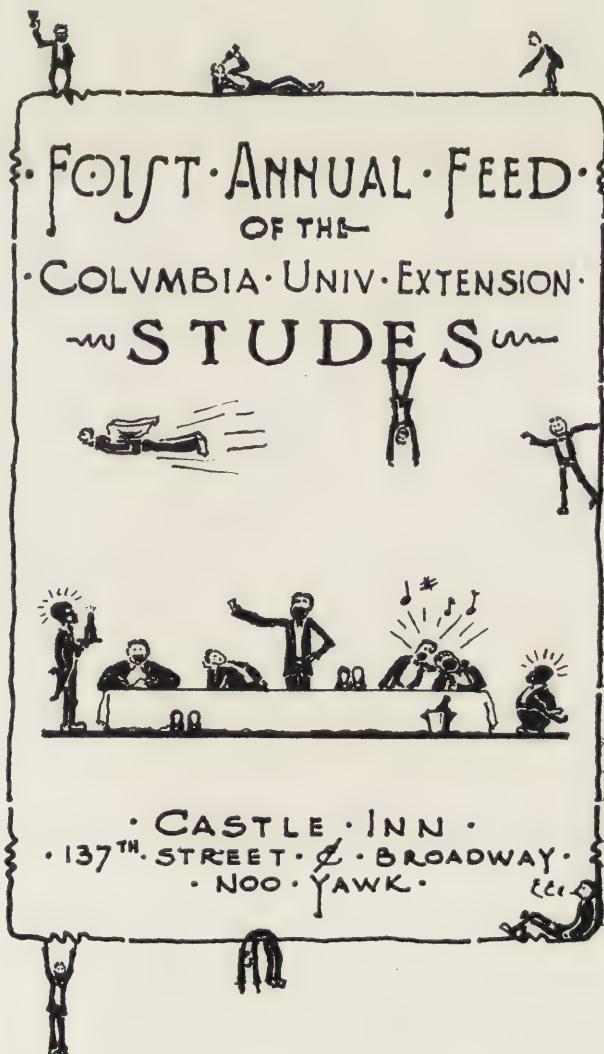
COLUMBIA UNIVERSITY EXTENSION ATELIER.

THE members of the Columbia University Extension Atelier met with the Electrical Engineering students of Columbia and held their annual dinner at Castle Inn.

This was the first attempt at Columbia University to bring the students of architecture into closer contact with the students of the various building trades. This gathering of about eighty offered a splendid opportunity for the future architects and engineers to discuss liberally their mutual problems. Greater interest was added by the presence and talks of Mr. J. V. Van Pelt, our critic, and Professors Curry, Hehre and Balmford. A very attractive program was drawn up by Mr. Edward Hurley.

It is hoped that the future dinners may have representatives from more branches of the building trades so that the discussions may be more general and of even greater value.

RAYMOND P. HUGHES,
Secretary, Columbia University Extension Atelier.



Cover of the Program, Columbia University Extension Atelier and Electrical Engineering Students Dinner.

PENCIL POINTS

WE GET lots of amusing things in the mail and here is one from Samuel N. Hannaford of Cincinnati, Ohio, accompanying a renewal subscription. When a man writes a poem as well as a check we feel distinctly complimented.

To Tommy Dolan:

The hand of time stays not for man
It passes all too soon.
And I just realized the fact
That soon it will be June.

But now I find I have some time
To do a do or two,
And while I'm making out some checks
I'll mail one out to you.

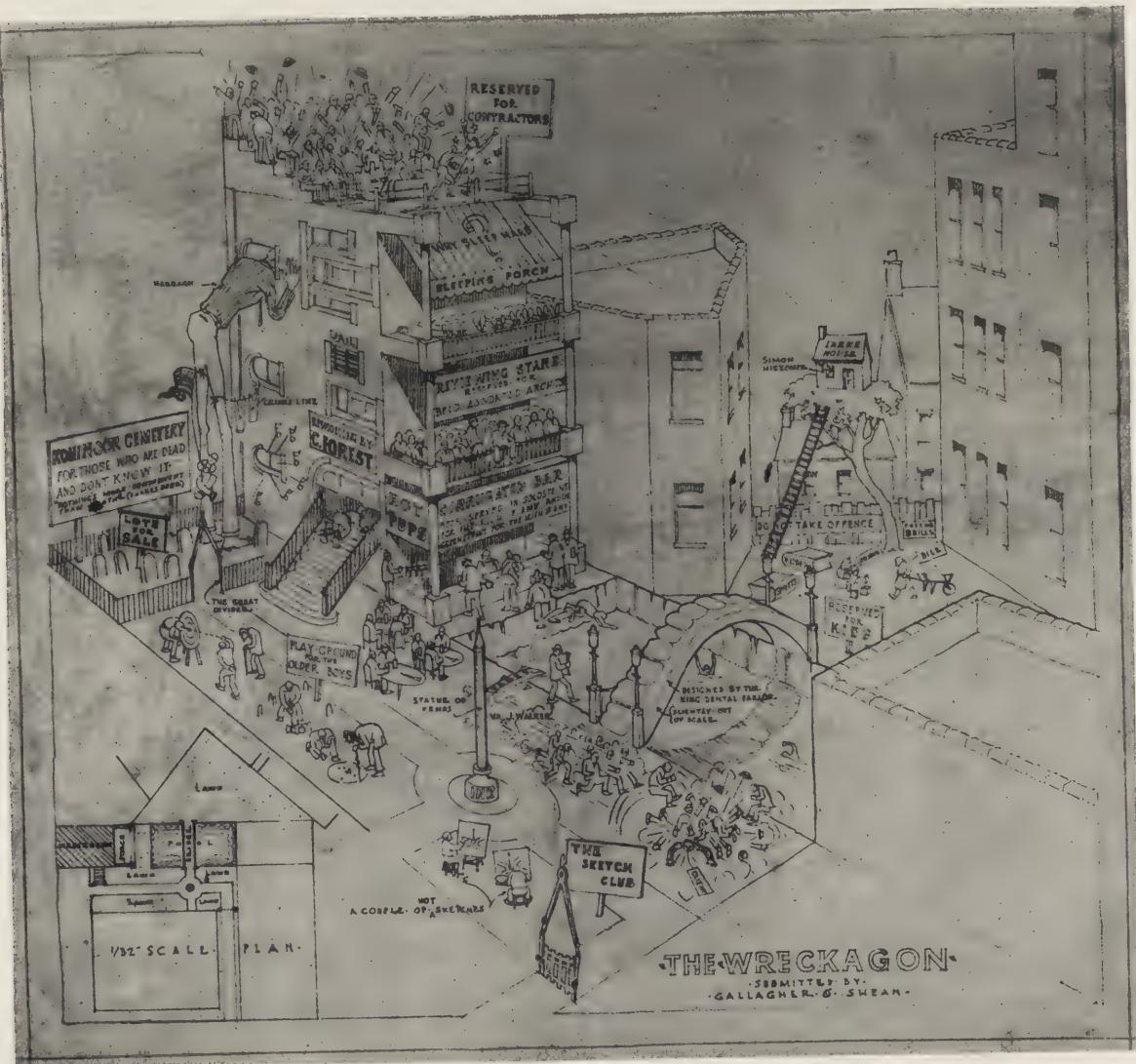
So that my subscription may run
Along some more
And monthly be delivered
Promptly at my door.

AND this is anonymous!
To R. W. R. Rah! Rah!
Five years cracking
Here and There and This and That

That Letter

"What is the Answer??
The draftsman, over forty
Is itchy, sore distressed,
He wonders what will happen
To him, with all the rest,
And yet he dares not scratch them
Or chase his fleas away.
Now when we're bit, we catch them,
And crack without delay.
Chorus (muchly)
Now, when we're bit, etc.

Ah! dear Faust, I knew thee well.
MEPHISTO, Act 1.



PENCIL POINTS:

I am enclosing a copy of a drawing by Mr. John J. Wade. The drawing was submitted in an humorous competition to select an architect to remodel a building for the local atelier.

This occurred about two years ago but the original came to life only a few days ago and I am sure that its humor can be appreciated just as well now as then.

The building was called the Rectagon and at a later date the atelier assumed the same name. It is a live organization and I can promise you that you will hear much more of it in the near future.

We would be more than pleased to see this drawing reproduced in PENCIL POINTS and hope you can find space for it.

Very truly yours,
W. Newell Reynolds, Sous-Massier, Atelier "RECTAGON," Buffalo, N. Y.

PENCIL POINTS



Rendering by Joseph McCoy. Municipal Auditorium, Minneapolis. Croft and Boerner, Architects and Engineers.

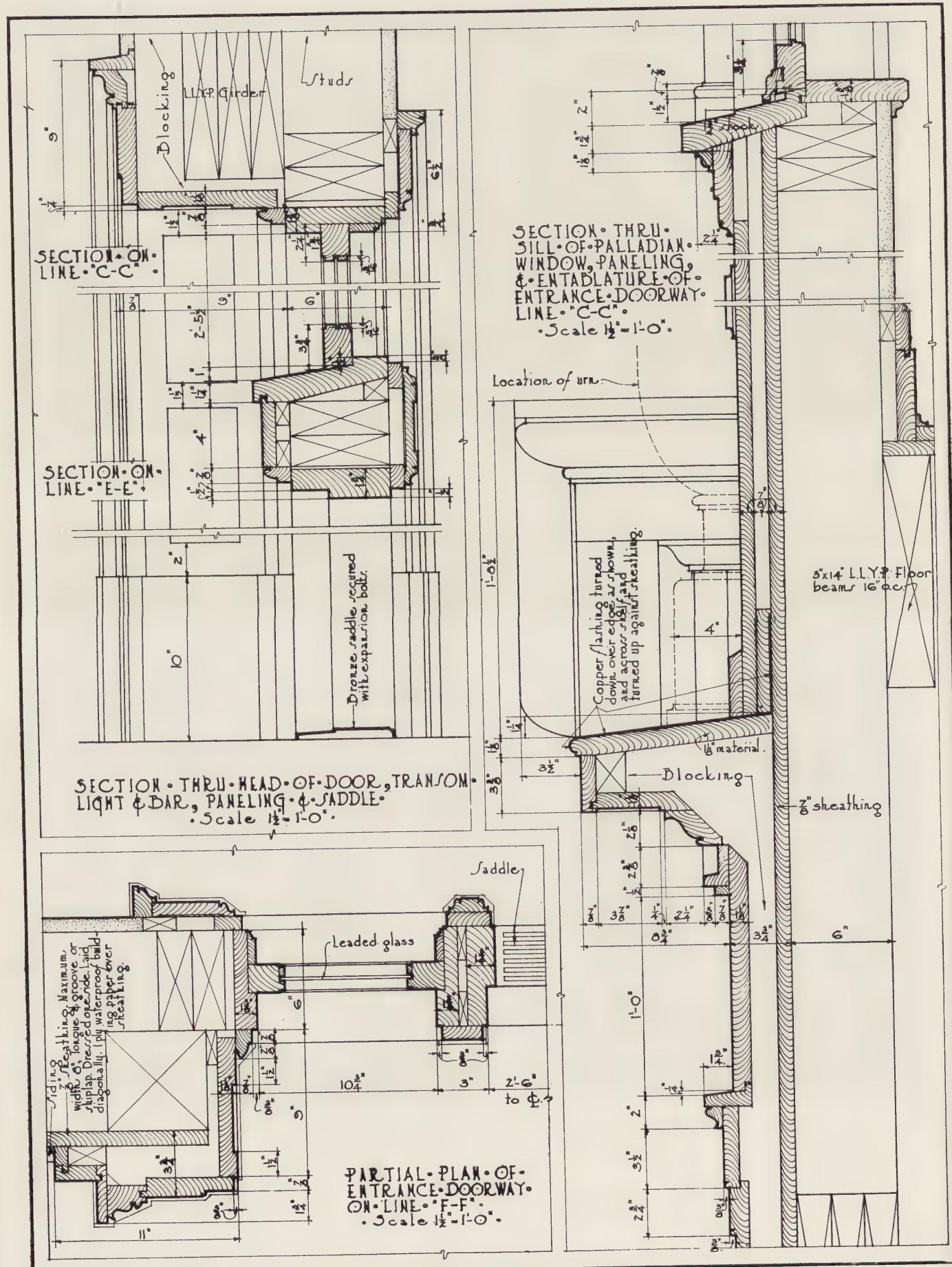


Water Color by Elizabeth Kimball Nedved, Chicago, Ill.

"Corpus Christi." Etching by Lee Fuller, Los Angeles, Cal.



PENCIL POINTS



Doorway and Window Details. This is one of the plates from Part II of "Good Practice in Construction," by Philip G. Knobloch, now in course of preparation by the Publishers of PENCIL POINTS.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART X

SPECIFICATIONS FOR EXCAVATING AND GRADING

IN the June and July issues were set forth the General Conditions and Supplementary General Conditions incidental to the construction of a "Consolidated District" school house. The following specifications will be found separated into Divisions in such manner that a general contract can be entered into for the entire work or one of the divisions removed from same and let independently.

Now follows:

DIVISION B. EXCAVATING.

NOTE. The Contract and General Conditions of these Specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these specifications for Excavating. The Contractor shall refer thereto as forming integral parts of his Contract.

ART. 1. SCOPE OF WORK.

(A) THE ITEMS Under this Division include:

1. REMOVALS.
2. STRIPPING.
3. EXCAVATING.
4. PUMPING.
5. SHORING.
6. BACK-FILLING.
7. GRADING.
8. SURPLUS MATERIAL, Disposition of.
9. TRANS-PLANTING.

(B) OMISSIONS. Final grading and dressing of top soil, together with sodding, seeding and planting, will be included in Division Z, Landscaping.

ART. 2. REMOVALS.

(A) BUILDINGS at present on the site, including two residences and a garage, shall be taken off the premises or razed by the Contractor and all parts of same shall become his property, to be removed from the premises at his expense, except that the Owner will first take away all portable furniture, and lighting fixtures.

(B) ALL TREES AND MINOR STRUCTURES, including stumps, roots, walls, paving, fences, foundations, walls, cisterns, cesspools and privy vaults, shall be removed, if any are found within the area to be excavated.

(C) EXISTING BASEMENTS and wells, cisterns and cesspools, if they extend below the level of the bottom of the excavation, shall be filled in with clean earth or sand, thoroughly puddled and tamped solid; but, if such previous excavations occur under new foundations, the Contractor shall notify the Architect and follow his instructions.

ART. 3. STRIPPING.

(A) THE TOP SOIL, if of black earth, shall be removed to a depth of 8" over the building site and for a space 20' 0" wide all around the building, or to property line, if less distant than 20' 0". All black soil shall be piled on premises where directed. Wherever the present grade is higher than the new finished grade at the building, the depth of stripping shall be extended to 8" below required finished grade which shall slope 1' 0" in 20' 0", unless otherwise indicated.

ART. 4. EXCAVATING.

(A) IN GENERAL. The Contractor shall excavate the site of the building (leaving 2' 0" space beyond it on all sides) as required for basements, walls, footings, piers, areas, pits, etc. to depths shown on drawings. Trenches for footings of walls, piers, etc. shall have bottoms of full width. If carried deeper than required, trenches shall have excess depth filled with same concrete as specified for footings, without extra charge. In no case may filling under foundations be done with earth or sand. Bottoms of all excavations shall be left level, free from rubbish, and reasonably smooth.

(B) INSPECTION AND SOIL TEST. No concrete for footings may be poured until the Superintendent has had opportunity to examine the surfaces to be covered. He may then order the concreting to proceed, or may order the surfaces to be placed in better condition, or may order a test of the bearing capacity of the soil made by the Contractor at the expense of the Owner, after which the bottom of the trench shall again be prepared at directed depth and submitted for inspection as before.

ART. 5. PROTECTION.

(A) BOXING TREES. All trees and shrubbery endangered by operations under this contract shall be carefully and adequately boxed with good planking.

(B) PUMPING. Trenches and all other portions of the work shall be kept free from standing water by pumping or other adequate means. Inlets to sewers, properly strained, may be used for such drainage as soon as available.

(C) SHORING. The Contractor shall provide all sheathing, shoring and bracing required to maintain earth walls of excavations or for the protection of streets, alleys or adjacent premises.

ART. 6. FILLING.

(A) BACK-FILL. No foundation walls may be covered by back-fill until the Superintendent has had opportunity to examine them and to determine whether or not sub-surface drainage is to be installed. All back-fill shall be of earth or other approved material from this excavation, placed in 8" layers, well tamped and settled with water.

(B) OVER DRAINS. A sub-surface drainage system is not part of this original contract. If required, the fill over same shall consist of clean, broken stone or gravel $\frac{1}{2}$ " to 3" dia. Joints shall first be covered with pieces of galv. iron or broken tile and care shall be taken, in placing the fill, to prevent injury or displacement to same or to the tile.

(C) UNDER FLOORS AND WALKS, any necessary filling shall be done to bring sub-surface to proper plane to receive cinders and well compacted and left level and free from rubbish. No frozen material may be used nor filling done during freezing weather. If the surface thus provided be not approved or if other areas on which cinders or concrete are to be placed be adjudged unfit, the rejected material shall be removed to such depth as directed and the area refilled as above provided. If the rejected material is original soil or fill of old standing, the Contractor will be given an extra order covering extra work as provided in Art. 13 of Div. A.

ART. 7. GRADING.

(A) AROUND BUILDING. The Contractor shall grade evenly around the building to lines given on plans up to a height 8" below finished grade lines, for a distance of 20' 0" all around, using only approved material from this excavation for the purpose. Any deficiency in grading material as well as final fill will be supplied and placed under Div. Z.

(B) DISPOSITION OF EXCAVATING MATERIAL. All material from the excavation and all waste and rubbish from graded surfaces and from building operations remaining after back-filling and grading are completed shall, as directed by the Architect, be distributed about the premises or removed from the site.

ART. 8. TRANSPLANTING.

(A) CERTAIN TREES AND SHRUBS on site, as indicated on plot plan, shall be properly removed, cared for and re-planted on premises by experienced men, where directed, and later properly tended until in safe growing condition.

DIVISION C. CONCRETE WORK.

(Author's Note:—In Part II, Div. C is "Foundations and Masonry" and Div. D is "Concrete, Plain and Reinforced, other than Foundations." Such separation of concrete work is desirable in many instances because, if one wishes to let an independent contract for slab work, it is still well to combine the Excavating, Masonry and Foundations in a single contract. For this typical school building specifica-

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tion, however, we will assume the concrete combined with the other masonry and in a general contract. This will avoid duplicating the concrete specifications.)

NOTE: (Here is repeated the note immediately preceding Art. 1 of Div. B.)

ART. 1. SCOPE OF WORK.

(A) THE ITEMS under this Division include:

- (1) ALL CONCRETE FOUNDATIONS, including reinforcement of same.
- (2) ALL CINDER FILL under concrete floors.
- (3) ALL CONCRETE FLOORS in main building and boiler house.
- (4) ALL CONCRETE TRENCHES and covers of same, if of concrete.
- (5) ALL CONCRETE STEPS AND STAIR SLABS.
- (6) ALL CONCRETE AND TILE ROOF SLABS.
- (7) ALL CONCRETE FLOOR FINISH AND BASE.
- (8) ALL CONCRETE PLATFORMS at entrances.
- (9) SUCH OTHER WORK as is herein set forth.

(B) OMISSIONS. Exterior walks and drives will be included in Div. Z.

ART. 2. GENERAL DESCRIPTION.

Note: Under the headings of this Article, there is given for convenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following specifications beginning with Art. 3.

(A) CONCRETE FOOTINGS shall be provided under all walls, piers and columns of main building and boiler house and under boiler stack; reinforced, where so indicated.

(B) CONCRETE FOUNDATION WALLS shall be provided extending from footings to bottom of cut stone base course; also concrete dwarf-walls in basement as shown.

(C) WATERPROOFING. Exterior walls below grade shall be waterproofed on the outside. All walls below grade shall be rendered impervious by the admixture of 8% of hydrated lime or other approved integral waterproofing added to the concrete in accordance with Maker's directions.

(D) FLOORS AND PLATFORMS resting on earth shall be of plain concrete.

(E) TRENCHES shall have concrete floors and walls, rabbeted for covers as detailed. Covers shall be of reinforced concrete where so indicated.

(F) COLUMNS shall be of reinforced concrete as detailed.

(G) REINFORCED CONCRETE LINTELS shall be provided for all openings in concrete and brick walls, except where steel lintels are particularly called for.

(H) REINFORCED CONCRETE SLABS shall be provided for all floors other than those resting on earth.

(I) ALL ROOF SLABS shall be of reinforced concrete as shown and detailed. Certain of these shall have tile cores where called for.

(J) REINFORCED CONCRETE STAIRS shall be provided in boiler room and in main entrances.

(K) FLOOR FINISH. Finished troweled surface of cement mortar shall be provided for all floors except where terrazzo or wood is specified.

(L) CONCRETE BASE shall be provided in connection with all concrete-finished floors in all plastered rooms.

MATERIALS

ART. 3. CEMENT AND LIME.

(A) ALL CEMENT shall be fresh Portland, of approved brand, capable of meeting the test requirements, and delivered in original cloth bags bearing the brand and name of the Maker.

(B) A TESTING ENGINEER, or a reputable testing laboratory, selected by the Architect, shall be employed by the Contractor who shall include in his contract price a sum equivalent to \$——— per 1000 bags to pay for such testing.

(C) TESTING. All cement shall be tested before using. All tests shall conform to the latest standard specifications of the American Society for Testing Materials and reports of same made in duplicate to the Architect. No cement may be used until proven by such tests to comply with said specifications. The Contractor shall therefore submit his first samples from local stock immediately after signing contract and the Architect reserves the right to release for use any cement after reports on the 7-day test, together

with tests for which insoluble residue, loss of ignition and chemical analysis reports have been submitted and found satisfactory. The 28-day tests shall be made in these as in other cases and reports filed as above called for. The Architect may also, for the purpose of expediting construction, release for use cement in storage which is certified by the appointed testing-engineer for laboratory.

(D) SAMPLING. For purpose of testing, one sample shall be taken from each 60 bags at random and properly tagged. Failure of any one of the samples to comply with the requirements will be, if so judged by the Architect, sufficient cause for rejection of the car-lot or bin from which such sample was taken.

(E) NON-STAINING CEMENT shall be white Portland of a brand approved by the Architect and guaranteed not to produce stains in contact with Bedford stone.

(F) CEMENT STORAGE. Cement in damaged, damp or caked bags will be wholly rejected. All cement shall be properly stacked in water- and weather-proof sheds with floors 12" above ground. Each shipment shall be labeled for identification. Cement from warehouse shall be tagged to indicate satisfactory test. Cement delivered from warehouse without test-tags will be rejected.

(G) LIME shall be approved mill-hydrate or fresh wood-burned in large lumps. No air-slaked lime may be used. Lime shall meet all requirements of the standard specifications of the American Society for Testing Materials. Hydrated lime shall be delivered in original packages bearing the brand and name of the Maker and shall be stored as specified in preceding paragraph.

ART. 4. AGGREGATES.

(A) SAND shall be "torpedo" or equal, composed of clean, hard, strong, durable, uncoated grains and shall be free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam or other deleterious substances. It shall range evenly in size from fine to coarse, none passing a No. 100 sieve and none remaining on a No. 10 sieve.

(B) CRUSHED STONE AND GRAVEL shall be clean, hard, strong, durable and uncoated, free from injurious amounts of soft, friable, thin, elongated or laminated pieces, alkali, organic or other deleterious matter. It shall range evenly in size from fine to coarse. For plain or mass concrete, it shall pass a 2" ring and be retained on a 3/8" ring; for reinforced work, it shall pass a 3/4" ring and be retained on a 3/8" ring.

(C) CINDERS shall be fine, clean, soft and free from an undue amount of unburned coal. Cinders from gas-plants or other objectionable source will not be accepted.

(D) WATER shall be fresh, clean and free from salt, earth, dirt and sewage.

(E) FLOOR FINISH MATERIALS shall be as required to produce the surface specified and of color selected.

(F) SAMPLES of all sand, crushed stone, gravel and floor finish material shall be submitted to the Architect and none may be used without his approval. Such approval before delivery shall not operate to prevent subsequent rejection of such materials as are not up to specification.

ART. 5. REINFORCEMENT AND BUILT-IN MEMBERS.

(A) ALL REINFORCING BARS AND RODS shall be re-rolled rail or new billet stock in rounds or squares meeting all requirements of the American Society for Testing Materials. Bars shall be deformed, of full length required and accurately bent to details.

(B) CHAIRS of approved pattern shall be used where called for or where necessary to retain reinforcing members in proper position.

(C) STEEL WIRE FABRIC shall be triangular mesh of catalog description shown on drawings or equal cross-sectional area of other make, if duly approved.

(D) BEAM CLIPS AND INSERTS for various uses shall be provided where called for and of approved material, make and pattern.

(E) ANCHORS for floor strips shall be galv. bent clips of approved make and design, to properly fit the wood strips.

(F) IN GENERAL, all reinforcing material and inserts shall be free from paint, oil, dirt, scale and excessive rust.

(G) SHOP DRAWINGS. The Architect's drawings show the disposition of reinforcing members and their size, arrangement and typical details. The Contractor shall develop these into complete setting diagrams and shall

PENCIL POINTS

prepare details and schedules showing each structural and reinforcing member in exact position and spacing, exact location of all openings, framing and special reinforcements, spacing and design of stirrups and the bending and length of bars, all in accordance with Art. 4 of the General Conditions. These details and schedules shall be submitted in ample time to be checked and to permit corrected drawings to be in the hands of Superintendent well in advance of time for preceding with the work.

Mr. Beach's reply to Mr. Gowen's letter, published last month, commenting upon the "General Conditions" presented in June.

I WAS very glad indeed to learn, from Mr. Gowen's letter in the July number, that a capable architect had taken sufficient interest in my "General Conditions" to offer so detailed a criticism. He may be assured that I greatly appreciate the interest manifest as well as the constructive value of the suggestions offered. May I be permitted to reply to them in detail?

In the first place, it must be borne in mind that I am trying for a standardization that will be sufficiently acceptable to a majority of architects to be adjudged more universally usable than others now in vogue. This presupposes an approximate ideal—but it also means that there will be some to whom these general clauses will not commend themselves.

Like Mr. Gowen, I do not favor the majority of architect's alibis and I have attempted to omit all such that would tend to cause a bidder to add a little "to play safe". Hence, I don't think I have hidden away any joker in these clauses whereby the architect can force a contractor to pay for the former's errors, or attempt to do so.

Referring to Mr. Gowen's letter categorically:

1. Yes, the editorial discussion of Art. 2 should have prefaced Art. 1, were it not for the fact that I wished to dispose of the variable matter of Art. 1 before proceeding to detailed consideration of those invariable portions which it is assumed should be standardized and printed in any office.

2. Experience has taught me that it is necessary for an architect to protect himself by just this clause (Par. F of Art. 2). I will cite two instances: A company had installed a new brick yard and was offering common brick below their competitors' rates. Their brick was alleged to be inferior and I was asked to inspect it at the yard before the contractor would buy it. The brick I saw were all right but the brick delivered were not. I have had similar experience with gravel and cement.

Perfection in an architect's superintendence is no more possible than in any other phase of the service he renders. If he can get the owner to employ a clerk-of-the-works, he can, of course, better his supervision but it is obvious that the quantity of supervision needed varies as the size of the work. A job may be too small to stand the expense of even a single clerk or too large for one man to handle in that capacity. Our "conditions" must meet all other conditions.

One of these is that, because an architect or superintendent or clerk fails to see a thing one day, it does not follow that he may not reject it the next. Another is that "passing" work shall not mean accepting it. The architect has the same right to have it assumed that he is supervising to the best of his ability that the contractor has that he is living up to his contract. Wherefore, if the architect discovers something improper a day or a week after it should have been observed, who shall suffer, the man who did it, the man who is paid to watch him or the man who is paying? Why not the first of these?

And here is the other case in point: An addition to a schoolhouse was not considered large enough to warrant the employment of a clerk and it was near enough to my office so I could visit it twice a day. On a morning visit they were just starting footings at a corner (in the old days when we used spread brick on solid ground). I checked measurements and found all o.k. It was a rush job with masons plentiful and they were crowding the trench diggers. When I visited the job again at noon, I found the footings all in and partly covered on the two lowest sides and started on the remaining side. I did not discover, until the walls were well advanced that the spot where they started was the only place on the low side where the footings had been carried down to within a foot of the proper depth. Should I have kept still or acknowledged

my oversight and made the contractor reimburse the owner for the saving? I did the latter.

3. The addition to Par. D of Art. 3 of the clause "However, upon request, the architect will assist in delimiting the divisions of work" would place him in position of assisting contractors in drawing their sub-contracts. I hardly think the average architect cares to do this or that the contractor wishes him to. Of course, one cannot escape being drawn into disputes on the subject but they are to be avoided rather than invited.

4. Mr. Gowen and I seem to agree here, except as to manner of expression. If I knew how to force contractors to get advance rulings on all matters which they consider insufficiently explicit, I would surely incorporate it. But, when one is constantly dealing with new bidders on a considerable building program, it simply can't be done.

5. Yes, a clause should be inserted, as Mr. Gowen suggests, obligating the owner, through the architect, to furnish all necessary information in ample time to avoid hindrance to carrying out the progress schedule.

6. I find nothing in Par. C of Art. 4 (which I think Mr. Gowen intended in place of "B") excusing the architect from responsibility for his acts, except that the second word "such" was accidentally omitted from the last sentence: "The Architect's approval, in such instance, does not make him or the Owner responsible for errors in *such* documents nor for any other unauthorized deviation from the terms of the contract." It was probably this omission which invited criticism.

7. Mr. Gowen's compliment is appreciated.

8, 9. This is the only part of Mr. Gowen's letter wherein we really disagree. Perhaps such difference of opinion would be lessened if I had introduced definitions differentiating between an architect's orders and his instructions to contractors. If, as Mr. Gowen states, everyone knows that architects cannot be counted upon to be sufficiently business-like to put their orders in writing, then they are entitled to the oft-repeated criticism on that score.

In that case, it might be well for them to remedy that defect in their practice. It has been my practice (and that of my superintendents also) to carry memo-books containing carbon sheets so that orders can be written on the spot, if advisable, and duplicates sent to office file.

As a matter of fact, the two paragraphs (D of Art. 5 and C of Art. 6) are perfectly consistent, both as to the issuance of written orders by the architect or of oral instructions by the architect or his superintendent. Under the head of "Instructions", for which the specifications do not demand writing, would come such items as:

Request to crowd a certain bit of work in readiness for others.

Suggestion that certain undesirable mechanic be fired.
Suggestion that certain material be brought on ground faster.

Demand that certain materials be unloaded with greater care.

Warning that certain features must be better protected.
Request that some individual be on the job at a certain time.

Suggestion that certain work be held back until architect or owner can be consulted.

Etc. etc., almost ad infinitum.

In fact, it is because there are so many of these things to be said and done and because the line between those which do not require record and those which do is so hard to draw, that one can easily fall into the habit of not keeping notes enough. It is a dangerous habit because, without a note to the contractor or, at least, a memo of the more important things, his remembrance or that of his foreman, is not likely to correspond with that of the architect or his representative. Therefore, on all properly conducted operations, the contractor *must* have written orders for everything which is of sufficient import to make a matter of record.

If architects (some architects) insist upon being unbusinesslike, it is no reason for one writing General Conditions accordingly.

10. It would be well if contractors could submit lists of their sub-contractors with their bids, but there is a very excellent class of contractors who do not take sub-contractors' figures until after their contracts are closed when they have more time to get sub-bids and profit accordingly. I do not subscribe to the statement that "Such a situation always means a skimping job, for the contractor naturally

PENCIL POINTS

makes up somehow the difference between the figures of the approved and rejected subs". It is too severe an arraignment of the whole fabric of contracting and architectural supervision. I believe there are contractors who attempt no such thing and also architects on whom they couldn't put it over, if they tried. This is the weakest part of Mr. Gowen's letter and I'm sorry he said it.

11. Mr. Gowen is right here. Par. D of Art. 11 would be improved by being divided into two sentences.

12. The subject matter of this criticism as well as that in Item 14 is fully covered in Item 2. Whether the work be "faulty" or "inferior" makes little difference. No architect is omniscient and he can frequently serve the owner's interests better by accepting imperfect work than by having it torn down.

For instance, I once found that a partition wall in a large stock yards building was $12\frac{1}{2}$ " thick when the contract called for 13". The contractor had saved a large quantity of mortar by having his longitudinal joints laid almost tight. The work had gone so far that I called in the company's manager and we decided that they would lose more by having the wall taken down than by allowing it to remain, so the contractor was assessed an agreed amount and the wall remains. I can't see where the architect lost either dignity or self-respect. I could cite several like cases, more especially in out-of-town work visited once a week.

But kindly present my compliments to Mr. Gowen and convey to him my thanks for his discussion of the subject. If architects did a little of this more often, I think we'd all be better off.

Sincerely yours,
W. W. BEACH.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Structural Slate.—A series of 13 documents covering in the most approved fashion all the information required by the architect, specification writer and draftsman concerning the material and its uses. Complete specifications, hundreds of drawings; a useful addition to every architectural library. Standard filing size. Structural Slate Co., Pen Argyle, Pa.

Lupton's Casements—Catalog No. C-122.—Illustrating and describing line of casements of copper-steel. Numerous detail drawings, specifications and complete information. $8\frac{1}{2}$ x 11. David Lupton's Sons Co., 2227 E. Allegheny Ave., Philadelphia, Pa.

Published by the same firm, Lupton's Steel Equipment, Catalog D. Showing line of shelving and other steel accessories including lockers and partitions for factories, stores and offices.

Drawing Materials and Instruments, 3rd Edition.—A complete catalog covering everything required in the drafting room with much valuable information to the draftsman. Bound in cloth. 380 pp. 6 x 9. B. K. Elliott Co., 126 6th St., Pittsburgh, Pa.

Lighting Fixtures, A. I. A. File 31F23.—A handsome portfolio showing complete line of exterior and interior lighting fixtures done in photogravure on one side of the sheet only. About 100 pages are included. The same material is presented in a bound volume for those preferring it. In case bound book is desired ask for Catalog No. 15. $8\frac{1}{2}$ x 11. Edwin F. Guth Company, 2623 Washington Ave., St. Louis, Mo.

Waterproofing-Dampproofing Specifications.—Book "A" of this series of six books, which will eventually cover the Truscon line. Portfolio form, standard filing size. AIA File No. 25C2. The series is designed with the requirements of the architect uppermost in mind. Truscon Laboratories, Detroit, Mich.

Lumber and its Utilization.—Details of heavy timber mill construction AIA File No. 19B4. A series of drawings in portfolio form covering the subject. $8\frac{1}{2}$ x 11. National Lumber Mfrs. Assn., Washington, D. C.

Roofing and Siding Specifications.—A. I. A. File No. 12-C. Details of roof construction and other valuable drawings, specifications and technical data. Standard filing size. American Rolling Mill Co., Middletown, Ohio.

Atlantic Terra Cotta, Vol. 7 No. 2.—Is on the use of color in the 17th century architecture of Mexico. One full page color plate and much other interesting material, including text by Leon V. Solon, Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Arc-Welding Building, AIA Classification 13-d.—Technical bulletin describing entirely new method of building construction whereby the frame is welded instead of being riveted or bolted, comparison of costs and complete data. Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.

The Gospel of Fresh Air.—9th Edition. Covers subject of ventilation and ventilators for all types of buildings. Much specification information and technical data. 36 pp. $8\frac{1}{2}$ x 11. The Swartwout Co., Cleveland, Ohio.

Electric Refrigeration for Residential Apartments.—New publication dealing completely with this subject with information for the architect and specification writer. Drawings, specifications, etc. 60 pp. $8\frac{1}{2}$ x 11. Delco Light Co., Dayton, Ohio.

Utica Imperial Boilers.—A new catalog covering boilers and radiation. Much useful information including blue prints of layouts, ratings, capacities, etc. $8\frac{1}{2}$ x 11. 36 pp. Utica Heater Co., Utica, N. Y.

Celotex Specifications, AIA File No. 37-A-1.—Detail drawings and complete instructions for the use of Celotex as an interior and exterior finish, also for sound deadening and insulation. Standard filing size. The Celotex Co., 645 No. Michigan Ave., Chicago, Ill.

Hauserman Partitions.—Portfolio of loose-leaf sheets covering hollow steel standard unit partitions, together with details, elevations and specifications. Standard filing size. E. F. Hauserman, Cleveland, Ohio.

Creolite News.—Volume 12 No. 3, shows perspective of the new Detroit Free Press Building, together with illustrations and data on the subject of floors built to withstand heavy duty. The Jennison-Wright Co., Toledo, Ohio.

Rawplugs.—Data sheet with detail drawings on the subject of Rawplug system of anchorage. Specifications, AIA File 27-A-41. Rawplug Co., 66 West Broadway, New York.

A. C. E. Steam Trap, Catalog "A."—Describes this specialty with its application in modern buildings. W. B. Conner, Inc., 223 West 33rd Street, New York City.

Gas Fired Steam Radiators.—Manual for those interested in this type of equipment with complete data, drawings, etc. A. H. Wolff Gas Radiator Co., 376 Lafayette St., New York.

Austral Windows.—AIA File 27-C-1, Catalog No. 26, illustrating complete line with detail drawings, specifications, weather strip details, etc. 48 pp. $8\frac{1}{2}$ x 11. Austral Window Co., 101 Park Avenue, New York.

The Moving Finger Writes.—Brochure on the subject of hydrated lime as used in modern building work. Profusely illustrated. 48 pp. $8\frac{1}{2}$ x 11. National Lime Association, Chicago, Ill.

Everything for the Fireplace.—Portfolio with illustrations of fireplaces and fireplace fixtures and accessories, including the Glow-Hot electric grate, a new feature. Standard filing size, $8\frac{1}{2}$ x 11. Colonial Fireplace Co., 4603 Roosevelt Road, Chicago, Ill.

Type F-18 Electric Dumbwaiter.—Data sheet illustrating and describing this item of equipment. Detail drawings showing installation. Warner Elevator Mfg. Co., Cleveland, Ohio.

Aqua-Silk, the New Waterproof Shower Curtain.—Booklet with color samples describing this new material for the well appointed bathroom. Crane Co., Chicago, Ill.

Knife Switches and Accessories.—Catalog No. 25 showing this line completely. 32 pp. 8 x 11. Frank Adam Electric Co., St. Louis, Mo.

Brass Pipe for Water Service.—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors. $8\frac{1}{2}$ x 11. 32 pp. The American Brass Co., Waterbury, Conn.

Ankyra.—Booklet showing application of this type of anchor in building construction. Sectional drawings showing details of application. 32 pp. Ankyra Mfg. Co., 148 Berkley St., Philadelphia, Pa.

Basic Specification for Tile Work.—A most valuable document for all architects, draftsmen and specification writers covering the entire question of setting and laying tile of all kinds. Complete and detailed specifications for all types of work under all conditions; ample space for memoranda. 40 pp. 8 x 11. Associated Tile Mfrs., Beaver Falls, Pa.

Architects' and Engineers' Built-up Roofing Reference Series, Vol. 1.—Flat roof specifications. A valuable document for every architect, draftsman and specification writer with 16 full page blue prints, specifications and descriptive text. $8\frac{1}{2}$ x 11. The Barrett Co., 40 Reitor St., New York City.

Plastering Specifications.—Specification folder covering standard forms for various kinds of work, arranged for the convenience of the specification writer. Standard filing size. Best Bros. Keene's Cement Co., Medicine Lodge, Kansas.

Wall and Ceiling Handbook.—Data on wall and ceiling construction for the residence. 16 pp. $5\frac{1}{2}$ x $7\frac{1}{4}$. Bostwick Steel Lath Co., Niles, Ohio.

Cabot's Insulating Quilt.—Catalog with detail drawings covering subject of heat insulation in modern buildings. Standard filing size. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Ingres.—Attractive little booklet published as a tribute to the memory of Jeanne Auguste Dominique Ingres, the great French artist. Photogravure illustrations of notable drawings. Canson & Montgolfier, 461 8th Ave., New York City.

'PENCIL POINTS'

VOLUME VI SEPTEMBER 1925 NUMBER 9

MODERNISM AND TRADITION

THE new practical requirements resulting from changes in the ways of living and of conducting business have to be met by present-day designers and a suitable architectural expression has to be given to these requirements.

There is a strong effort on the part of many architects in this country to produce architecture that is vital, in fact they feel themselves practically compelled by the advances and changes in the world around them to produce designs better suited to our times and needs than the scholastically correct buildings produced a generation ago and still admired for the scholarship they display.

In this striving after a new expression in architecture American architects as a rule make full and intelligent use of the rich store of historical design inspiration handed down to them by the architects of past generations. They are more inclined to a broad eclecticism and to the free interpretation of traditional design than to radical independence. Their sound training usually prevents them from committing the excesses indulged in by some of the extreme modernists among European designers.

In solving their problems some architects, notably the extremists in Germany and in countries where the German influence is strong, have turned completely away from tradition and sought to build up a method of architectural design entirely independent of everything that the past has to offer. They have produced some designs that look more like battleships than buildings, and many that look utterly unlike anything ever seen or imagined before. They have done this by what they believe to be the logical development of the design in terms of the materials of construction. Many of these buildings are of concrete and have the appearance of having been cast entire in a mould rather than of having been built. Some of these designs were shown at the Architectural Exposition in New York last spring and not long ago much space was devoted to designs of this kind by one of the leading British architectural journals. These things are interesting as experiments, weird looking as some of the results may be.

The buildings of the Exhibition of Modern Decorative and Industrial Arts, now open in Paris, show many varieties of Modernism in their design, ranging all the way from the plain cubical Pavilion of the Soviet to the French, British and Italian Pavilions with their distinctive styles of modern treatment. The entrance to the Exposition shows an attempted compromise between pure Modernism and the architecture of the Grand Palais and the Petit Palais, between which this entrance lies. The Exposition is a highly interesting conglomeration of extremist archi-

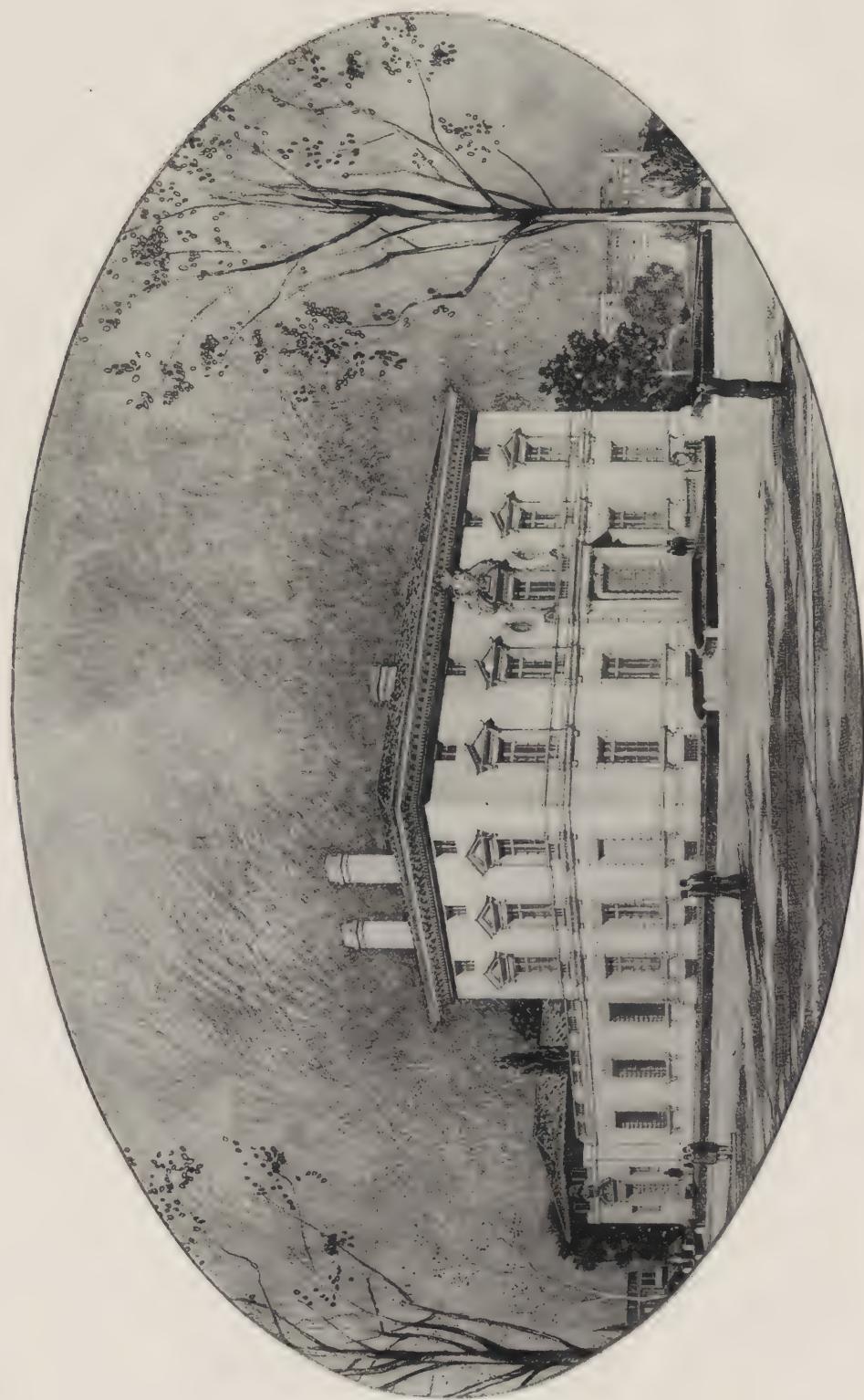
ture from all over Europe—such an assemblage as has never before been brought together, a riot of Modernism.

The chief style characteristic of practically all of these buildings is the set of mannerisms that has come to be regarded as the basis of the Modern Style, starting with the work which Professor Hoffmann, of Vienna, and Peter Behrens and others did some twenty-five years ago.

Nevertheless, each of these buildings is strongly marked by the national characteristics of the people it represents. This is due partly to a free expression of national taste in form and coloring and partly to the use in a modified way of elements found in the historic design work of these nations. However, it is all embryonic, to say the least, and there is apparent too great a conscious effort to do something different.

A much better way, in theory at least, of attaining a high degree of Modernism is the plan of procedure outlined some twenty-five or thirty years ago by Victor Horta, head of the Art Institute of Brussels for practically a life time. Dr. Horta advised the thorough understanding of practical modern requirements and a thorough study of methods of construction. In addition he advised the analytical study of historic design with a view to gaining an understanding of the basic principles which underlie such design. He proposed that the architect, having had this training, should design not only in accordance with the practical requirements, and the nature of the material but in conformity with the basic principles of good design revealed by the work of the past. Good as Dr. Horta's theory was it seems never to have brought any significant practical results in application. The work of extreme modernists or those who are attempting to make themselves independent of the past, forces upon us the conviction that no man or group of men can create in a life time a manner of architectural expression approaching the excellence of the work produced by those who make proper use of the traditions that have been gradually developed and handed down through thousands of years. It seems to be in the effort to produce good ornament and detail in general that the man who cuts loose from traditional sources of inspiration fails most seriously.

Somewhere between the extremes of ultra-conservatism and of radicalism, undoubtedly lies the right path, which men all over the country are trying to find and follow. It is one of the live questions of the day, this matter of modernism and tradition and we should like expressions of opinion from our readers. Won't you write us an informal letter on this subject?



*Perspective of the Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

THE PRODUCTION AND HANDLING OF DRAWINGS

BY H. DESMOND UPTON

IN AN office doing a general practice and not confining its work to a standardized special type of building, there can be no set drafting room practice in connection with the preparation of the drawings and specifications.

There must be, of course, the fundamental principles that obtain in any well ordered architect's office which require that work be handled in a business like manner, with due dispatch and by competent people, and that the artistic side is neither neglected nor allowed to run wild to the confusion of the job. In other words, the interests of the client must be protected and the contractor held to a fair and correct interpretation of his obligations.

The steps of development may be classified broadly as comprising: (1) sketches, (2) preliminary drawings and preliminary specifications, (3) final working drawings, details and specifications for estimate and contract, (4) further scale details and all full size details necessary for the contractor's information to complete the building.

On preliminary sketches the draftsman must have the following information:

1. General program of Owner's requirements;
2. Location, size and topography of property;
3. Requirements of all governing laws and ordinances;
4. Approximate limit of cube, based on approximate limit of cost. This will also regulate the choice of materials and will influence the character of the design. The Owner's preference in design should be ascertained, especially, if some particular building or buildings embody the Owner's preference in architectural treatment and materials.

When the sketches have been developed far enough to determine the general scheme, the preliminary working drawings can be started safely at large enough scale to allow more detailed study including the structural and mechanical engineering work. These drawings will be the basis of the final working drawings and with preliminary specifications will also serve for preliminary estimate, if wanted.

When all items are sufficiently developed to the Owner's approval, final working drawings, details and specifications for builder's estimate and contract can be produced in minimum time, since the bulk of the study will have been made and there is fair assurance of the general coördination of the architectural, structural and mechanical engineering requirements.

Large scale details that will affect the working drawings should be started coincidently with the working drawings. This will help in reducing the possibility of changes in working drawings and also

bring any special problems to the surface for immediate solution.

Specifications should be started as soon as working drawings are blocked out, to allow ample time for materials and finish to be decided before any indications are noted on the drawings. Any special equipment should be taken up immediately with the manufacturers so that all requirements of such equipment involving other trades can be provided for in the plans and specifications.

Information and instructions affecting the drawings or specifications should preferably be in memo form, in duplicate or more copies—one copy to the draftsman in charge of the drawings, one to the specification writer and additional copies to the structural and mechanical engineers if their work is affected. By this method, information reaches all persons simultaneously and affords opportunity for back check. It also obviates many discrepancies and conflicts in drawings and specifications.

The procedure in the drafting room, from preliminary sketches to final drawings and details, is a matter of proper administration to see that correct information is furnished promptly to the draftsmen, the specification writer, and to the mechanical and structural engineers and that the architectural, mechanical and structural requirements are properly coördinated, and carefully checked against each other to avoid costly alterations and corrections later on—both in the drawings and at the job.

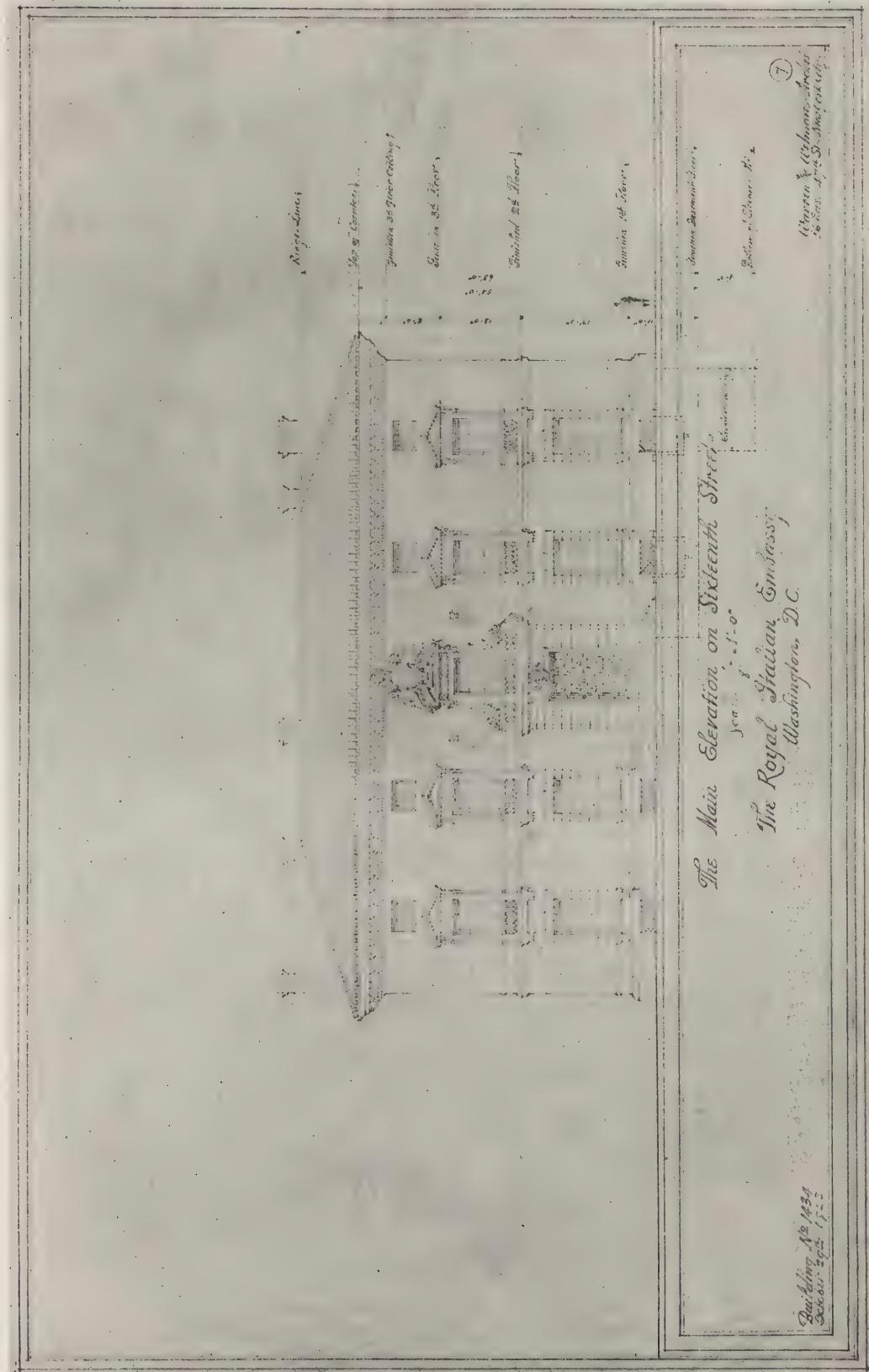
So far as the method of producing the drawings is concerned, this should be systematized to insure uniformity in the quality of the drawings and to produce all the required information without needless repetition or useless elaborating.

Care must be taken to reconcile the varying degrees of drafting ability in order not to have drawings of similar classification show large differences in quality and appearance. While it is not advantageous to the draftsman to be confined to plans only, nor elevations only for all jobs, the work must be arranged so that, for a given job, the plans have as uniform a quality as possible and likewise for elevations and details. This is not for a matter of appearance, but to preclude items of importance being overlooked, due to the varying drafting ability, as the quality of draftsmanship is often an index to the attitude of mind of the draftsman as to what matters are of the most importance—the design or the construction and practical requirements of a building.

Working drawings and details being essentially instruments of trade, they must be clear and intelligible. Any repetitions or unnecessary indications that tend to confuse the drawings must be suppressed. Neatness and accuracy of draftsmanship

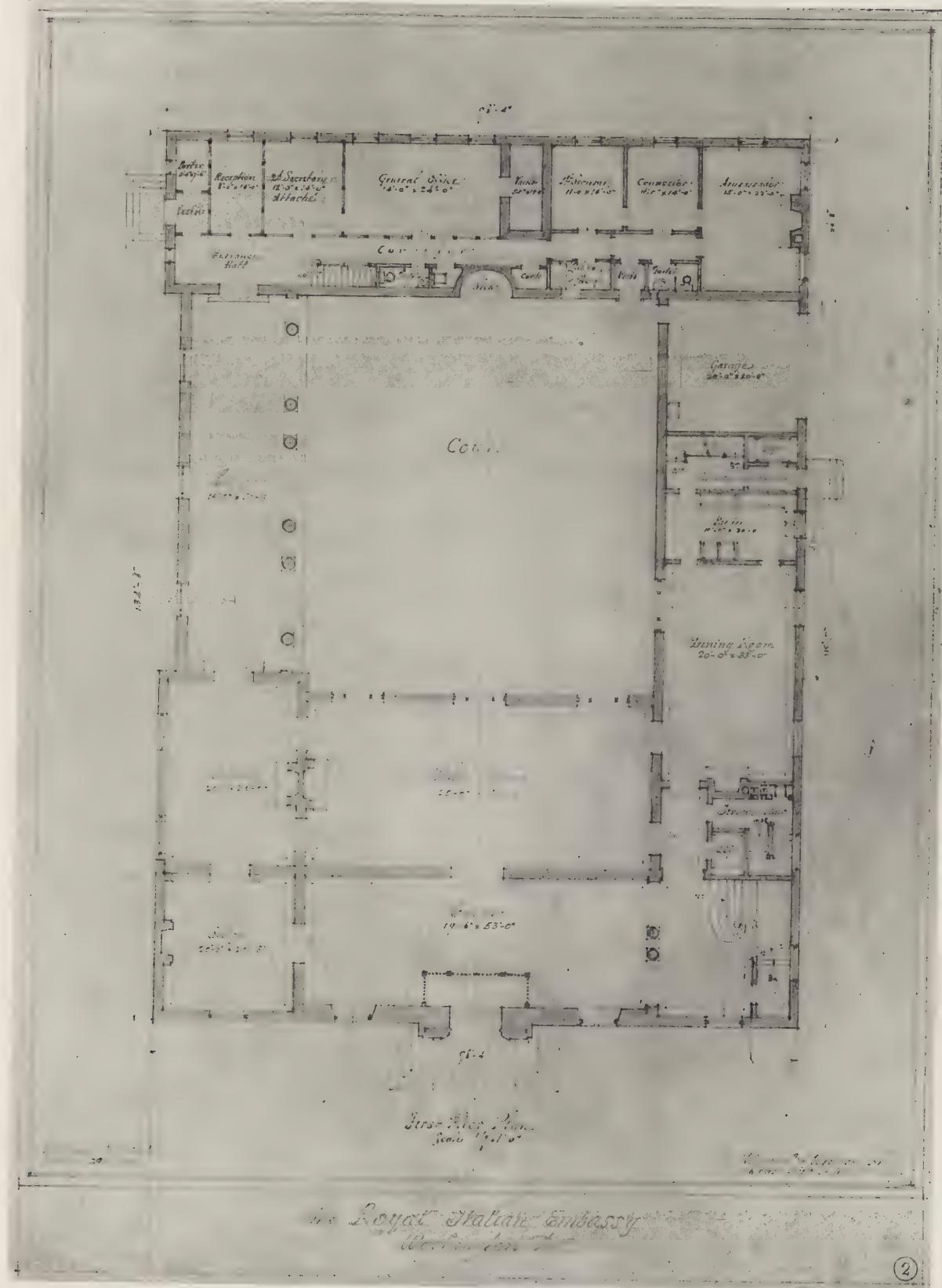
(Continued on Page 53)

PENCIL POINTS



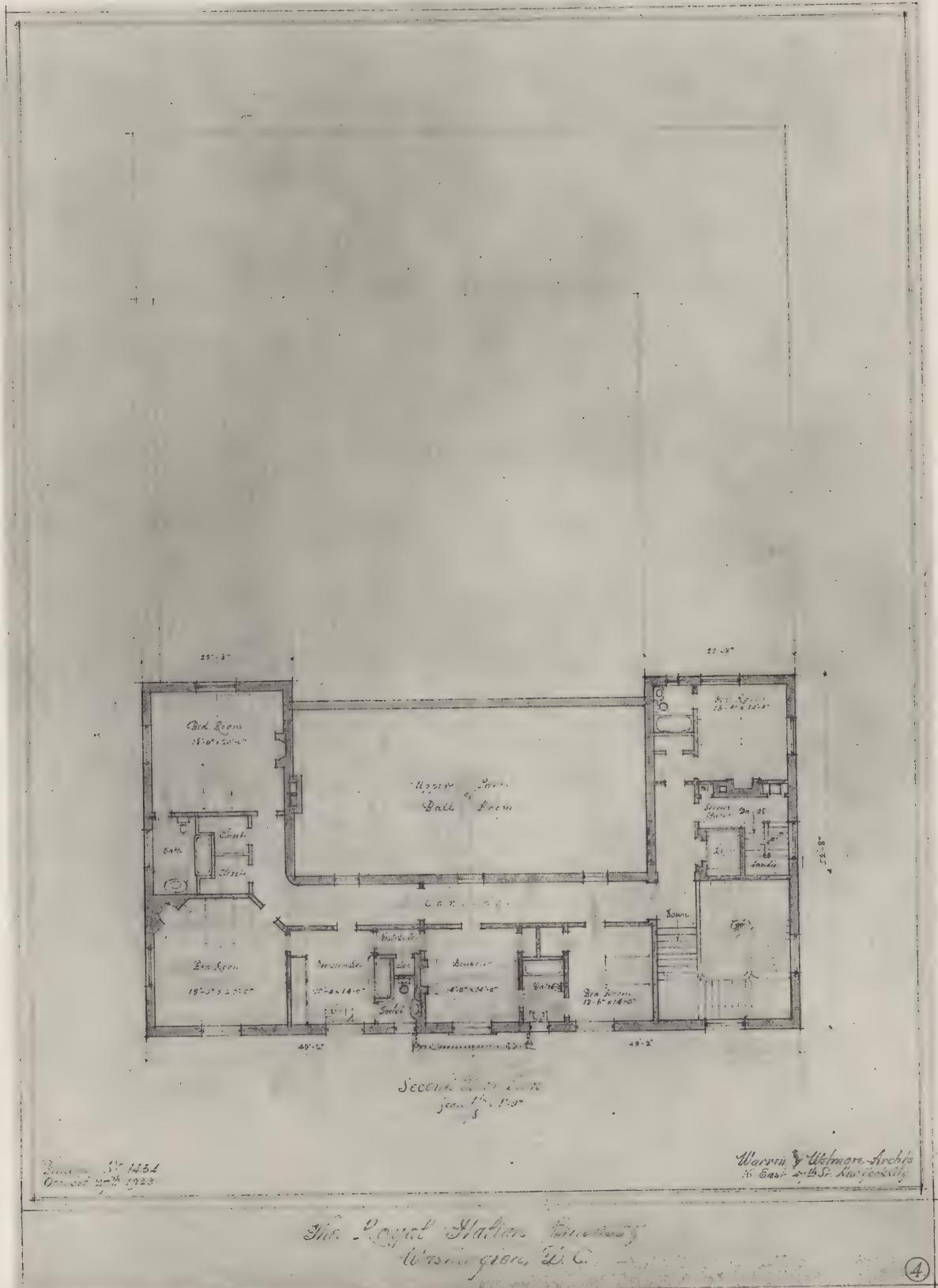
Preliminary Drawing, Main Elevation—The Royal Italian Embassy, Washington, D. C. Warren & Wetmore, Architects.

PENCIL POINTS



*Preliminary Drawing, First Floor Plan—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

PENCIL POINTS



Preliminary Drawing, Second Floor Plan—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.

PENCIL POINTS



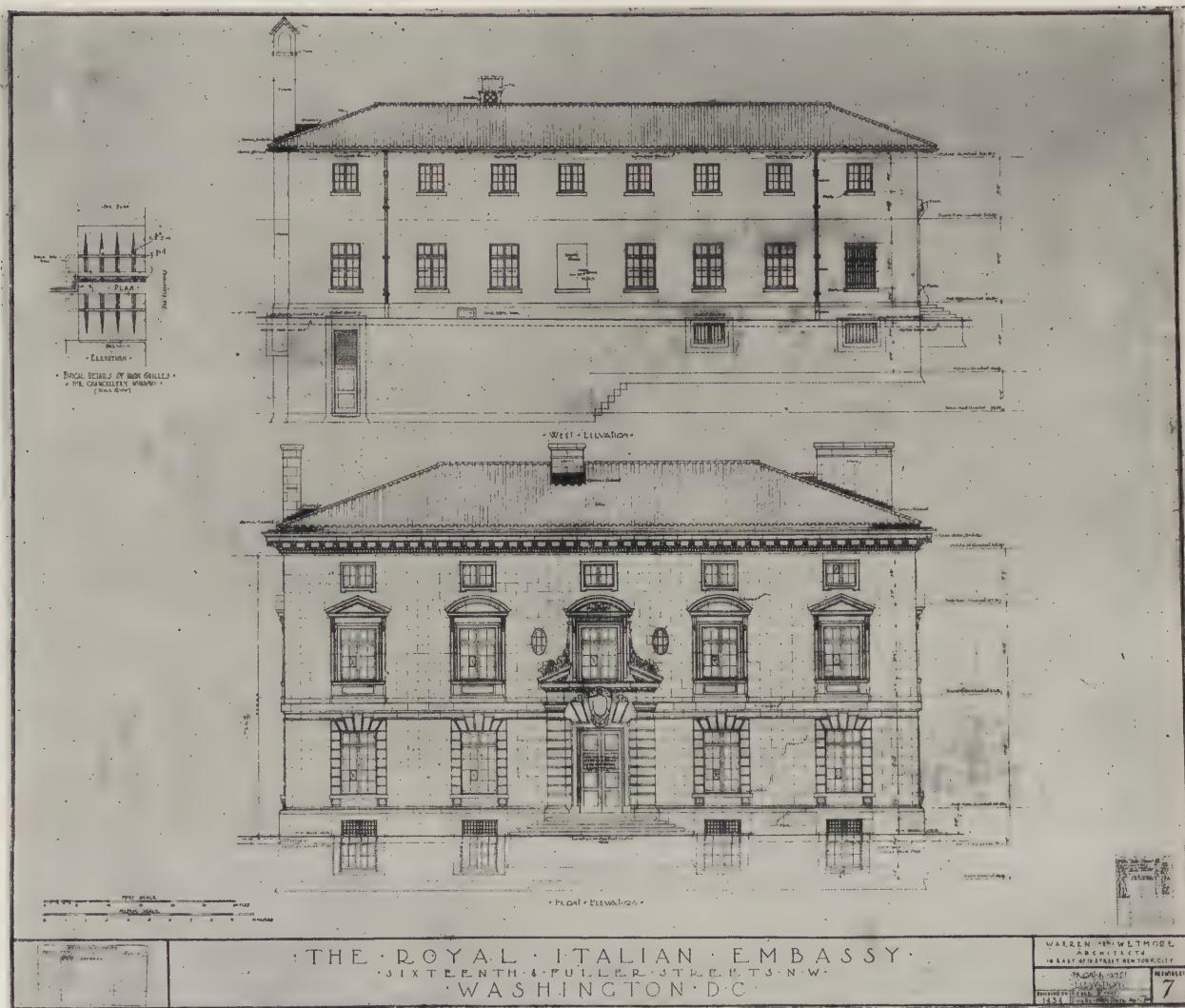
1. Preliminary Drawing of Second Floor over Chancellery & Garage.

Second Floor Plan
of
Chancellery & Garage

The Royal Italian Embassy
Washington, D.C.

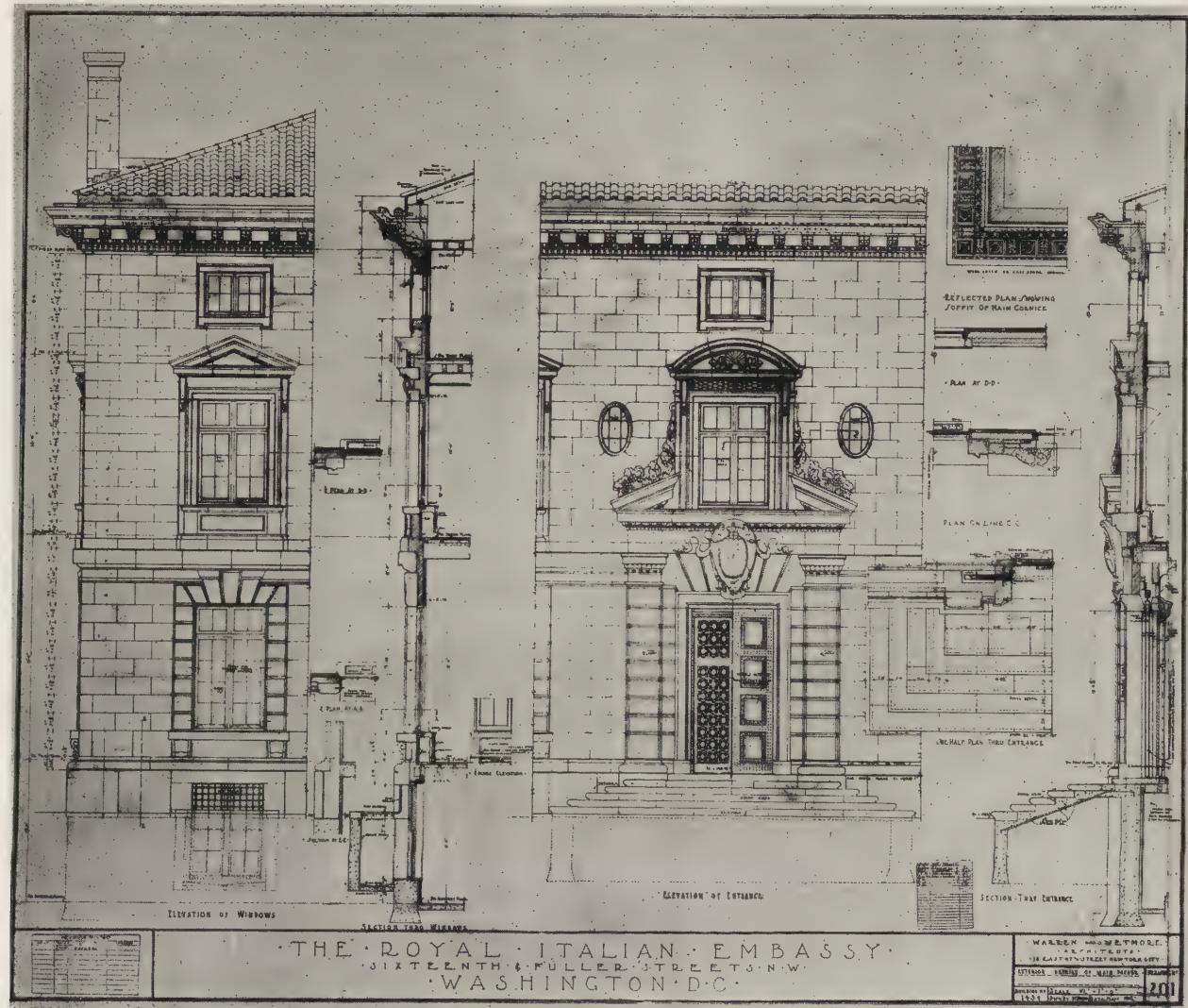
Preliminary Drawing, Second Floor Plan over the Chancellery and Garage—
The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.

PENCIL POINTS



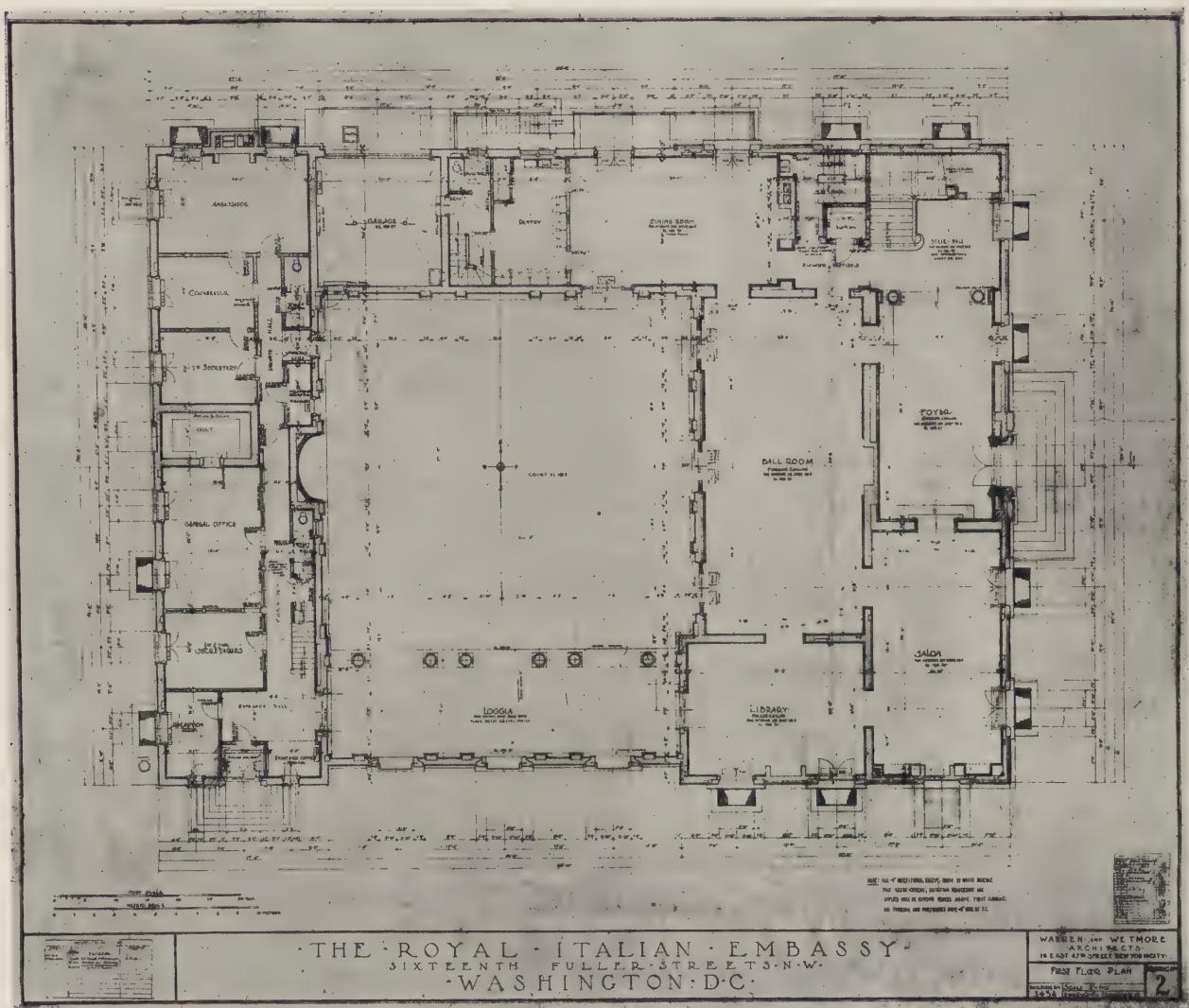
*Working Drawing, Main Elevation—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

PENCIL POINTS



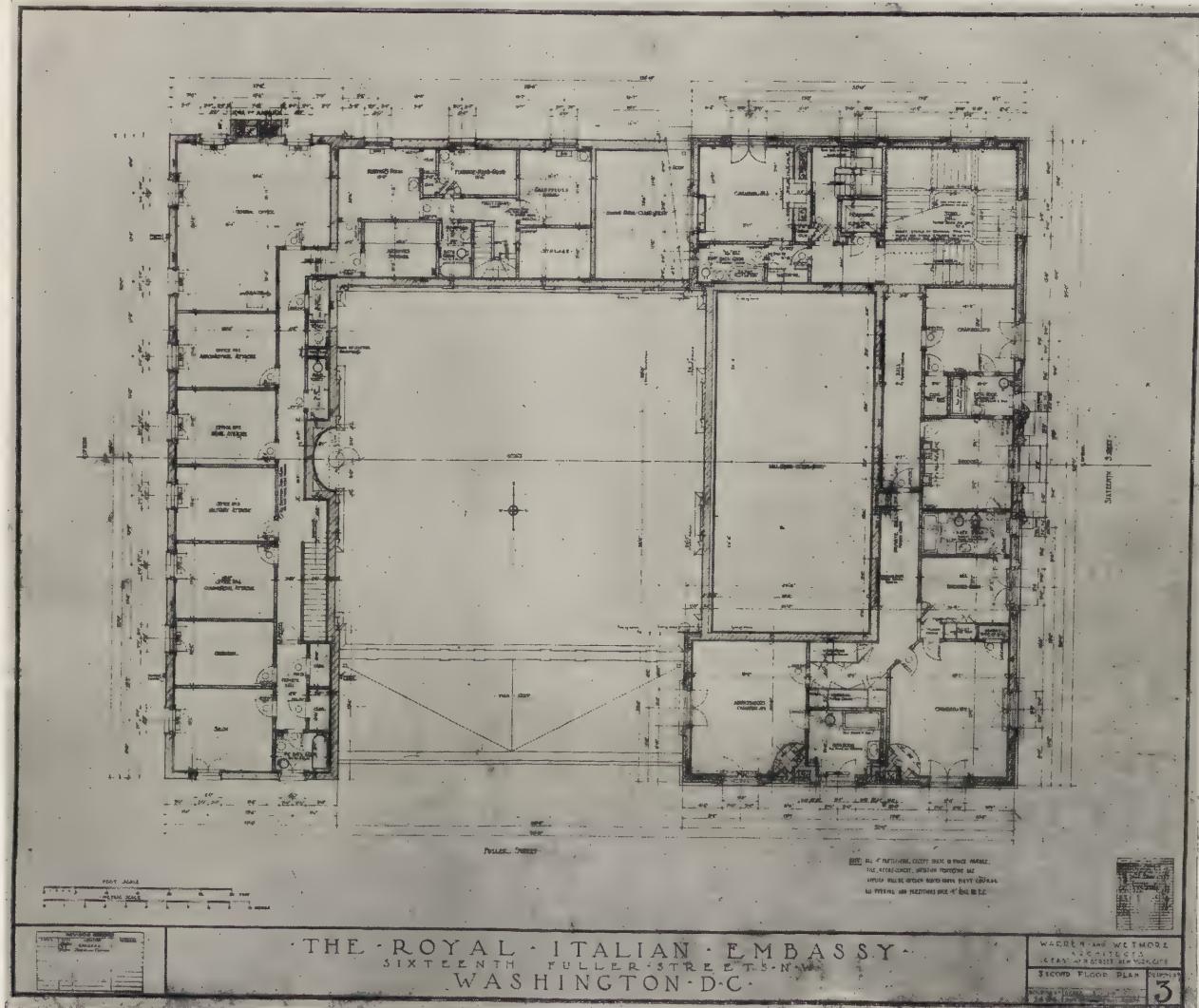
*Working Drawing Details of Main Elevation—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

PENCIL POINTS



*Working Drawing, First Floor Plan—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

PENCIL POINTS



Working Drawing, Second Floor Plan—The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.

ARCHITECTS

TRANSMITTAL OF DRAWINGS, PRINTS, SPECIFICATIONS, ETC.

BUILDING _____ **DATE** _____

DATE

TO (NAME) _____

(ADDRESS) _____

DEAR SIR:

WE ARE SENDING YOU THIS DATE THE FOLLOWING

PRINTS
DRAWINGS
SHOP DRAWINGS
SAMPLES

* FILE NO.
B. P. ORDER

SUBMITTED BY _____

AND THE FOLLOWING SPECIFICATIONS:

SUB-DIVISION	ADDENDA	NO. OF SETS	SUB-DIVISION	ADDENDA	NO. OF SETS

SENT YOU FOR THE FOLLOWING REASONS:

SENT BY ARCHITECT'S MESS'GR
RECEIVER'S MESS'GR
BLUE PRINTER
EXPRESS
MAIL

YOURS TRULY

PER

Printed Form for Transmittal of Drawings, Prints, Specifications, etc.

PENCIL POINTS

(Continued from Page 43)

are essential but nothing is gained for the client by producing elaborate drawings of the "engraving" type and often excess zeal in drafting will tend to increase the estimates of cost submitted by contractors. It certainly increases the architect's drafting cost and the length of time required to complete the drawings. This last item is an important factor where the Owner has heavy carrying charges to consider as part of his financing.

The drawings for the Royal Italian Embassy at Washington, D. C., which are reproduced herewith, illustrate the development from preliminary drawings through to finished details. In this particular building, however, it was deemed advisable to make the working drawings of the elevations complete in repetition of detail, ornament and window sash, etc., on account of their being submitted to a foreign government for approval. Ordinarily, much of this repetition could be eliminated and covered by notes, such as "Continue all ornament", "Repeat sash and frame as at A", etc.

Much time can be saved by furnishing the draftsman with details or drawings from other jobs covering similar problems of construction in arrangement for his guidance and information and there is no necessity to build up drawings independently for each job. In this way draftsmen of lesser experience can be utilized for some of the incidental detailing, such as windows, doors and interior trim, except, of course, where special study is required to meet special conditions.

When revisions are contemplated in the working drawings after the building contract is let, it is inadvisable to make these changes on the contract drawings until estimates have been obtained and approved. For this purpose, the contemplated changes should first be shown on "change sheets" or "Change Records."

These drawings, if made directly from the contract drawings, showing the change together with enough of adjoining unchanged work to properly locate and explain the proposed revision, can be issued for estimate and so marked and, if approved, can be marked and issued as a "paster" to the contract drawing to all concerned. This procedure definitely identifies the change and forms a permanent contract record. It also reduces the expense of blue printing as it is not necessary to reissue prints of the entire drawing affected by the change.

As soon as a Change Record is issued as a contract drawing, the original contract drawing should be revised. This work can be done by a junior draftsman as it is a matter of erasing on the contract drawing and tracing from the Change Record.

The contract drawing is then marked as "Revised August 1st, 1925, Change Record No. 1" and the revision is thereby definitely located and identified. The usual notation put on revised drawings such as "Revised August 1, 1925, stair changes" or some similar vague generality is a constant source of dispute and misunderstanding and should not be allowed on jobs of any magnitude.

A standard schedule of lettering will help to produce a more uniform set of drawings; a standard schedule of materials prevents confusion and errors in indication and reduces the possibility of conflict in drawings and specifications; a standard system of numbering the drawings helps in filing drawings in the office and at the job, as it separates the different classifications such as $\frac{1}{4}$ " or $\frac{1}{8}$ " working drawings, scale details, full size details, and all structural and mechanical engineering drawings.

As to identification of drawings; all preliminary drawings that have any value as a record should be identified by a drawing number, job number and date. For this purpose a "preliminary drawing" stamp is useful. All sketches not sufficiently developed to be classed as a preliminary drawing should be identified with the job number, and if such sketches are to be kept for future record, as, for example, on account of Owner wishing further development of the drawings to be delayed or postponed, then a "sketch" stamp, as illustrated, will identify the sketches and facilitate filing.

The segregating of working drawings and details into group classifications and numbering them according to these classifications simplifies the locating of any drawing during the active progress of the job and also for future reference in connection with a completed job, as by this means it is not necessary to go laboriously through an entire drawing list to find a particular drawing.

The drawing number of each sheet should be prominent and the "job" number should be less conspicuous. This prevents the possibility of the contractor confusing the drawing number and "job" number in referring to a blue print, especially if the architect uses a rubber stamp impression on each drawing in place of hand lettering as the impression may be faint due to a poor inking of the stamp and it may be difficult to read on the blue print what each of the two numbers represents.

Shop drawings as soon as received should be given a "received" date and a record should be kept showing when received, when returned for correction or returned approved. This record is valuable in case of any claims for extension of time by subcontractors based on delay in receiving approved shop drawings. It also serves as a check in the architect's office to prevent delay in the return of shop drawings.

A record copy of each shop drawing folded to a standard size for filing and stamped on a convenient corner with a form stamp giving general information for ready reference permits the immediate location of a required print in the file. At the completion of the job the final approved shop drawings can be quickly refiled for permanent record and all prior prints destroyed.

The use of a printed form (transmittal form) to accompany all blue prints, etc., issued to contractors, made out in duplicate with the particular information as to drawing numbers, specification sheets, etc. and why these prints are issued, saves writing

(Continued on Page 56)

1

2

3

SKETCHES

SKETCH

FILE FOR RECORD ONLY

ARCHITECTS
NEW YORK
Building No. _____
Preliminary Drawing No. _____
Drawn by _____
Date _____

4

CHANGE ON SHEET		CHANGE RECORD No. _____		
DRAWN BY _____ DATE _____		BLDG. No. _____	AFFECTS DWG. NO. _____	FOR ESTIMATE OR APPROVAL ONLY ISSUED _____
SCALE _____		BUILDING		PROCEED ISSUE DATE _____
ORIGIN OF CHANGE _____ _____ _____		ARCHITECTS NEW YORK CITY		REMARKS _____ _____ _____
NOTE: NO REVISIONS ARE TO BE MADE ON THIS RECORD				

5

Figure 1, Revision Record; Figure 2, Issue Stamp; Figure 3, Sketch Stamp; Figure 4, Preliminary Drawing Stamp; Figure 5, Change Record.

TRADE	DWG. NO.
TITLE	
CONTRACTOR	
BUILDING	BLDG. NO.
NOTES	

6

NEW BUILDING
FOR

ARCHITECTS	
DRAWING NO.	
SCALE	DRAWN BY
	DATE
BLDG. NO. 1357	

7

THIS DRAWING VOIDS	
DWG. NO.	DATED _____

8

THIS DRAWING FOR ESTIMATING ONLY	
NOT TO BE USED FOR CONSTRUCTION OR FOR SHOP WORK	
-ARCHITECTS	

9

SUPERSEDED	
SEE DWG. NO.	DATED _____

10

Figure 6, Shop Drawing Stamp; Figure 7, Job Stamp; Figures 8, 9 and 10, Stamps the use of which is self evident.

PENCIL POINTS

(Continued from Page 53)

letters and the carbon copy duplicate kept in a special file for handy reference in the drafting room is a record of what has been issued and the date of issue.

Stamping each print with the date it is printed is a safeguard against the use of obsolete prints, especially when reference is being made to any drawing in telephone conversations.

A notation on the original tracing, filled in each time it is issued for printing, stating to whom the prints are to be sent and the date of such issue reduces discussion at a later date as to the issue of such prints, although it is not, of course, definite proof of prints having been received, and more than compensates for the small amount of time involved in making the notations. For this it is convenient to apply an issue stamp to each tracing when made and to enter in ink on the tracing the name of the firm or person to whom prints are issued each time before the tracing is sent to the printer.

A proper filing system for all drawings and the employment of a competent person, with assistants if necessary, to keep it in proper working order, is a necessity that increases with the volume of work being handled in the office. This applies not only to active jobs, but also to completed ones and permits obtaining useful data from other jobs that would otherwise have to be worked out anew for each building. Such a filing system, if worked to full advantage, will more than pay for itself in the reduction of cost of production and in time saved.

These are a few of the essentials in drafting room practice, and they apply in general to all offices—large and small. The degree to which they are developed depends on the size of the office and the amount of work being handled. These principles apply, of course, only to the mechanical means of producing the work. This article is not intended to enter into the question of office morale which must be maintained at a high level otherwise the whole production in the drafting room will suffer both materially and aesthetically.



*The Royal Italian Embassy, Washington, D. C.
Warren & Wetmore, Architects.*

PENCIL POINTS

VOL. VI, No. 9

PLATE XXXIII



DRAWING BY SAMUEL V. CHAMBERLAIN
THE CHURCH, L'ISLE-sur-SORGUE, FRANCE.

On the other side of this sheet is reproduced a delightful drawing from the collection which Samuel V. Chamberlain recently brought back with him as a result of a European trip. There is an admirable quality in the pencil work that gives this drawing value in addition to that which attaches to it as a good presentation of an interesting architectural subject. Through the courtesy of Mr. Chamberlain we shall present other of his sketches in succeeding issues.

PENCIL POINTS

VOL. VI, No. 9

PLATE XXXIV



DRAWING BY EDWARD H. BENNETT
STAIRWAY, SKETCH OF NEWEL. CONCOURS GODEBOEUF, ECOLE des BEAUX ARTS.

A masterly study of detail by Edward H. Bennett for a design entered by him in the Concours Godeboeuf at the Ecole des Beaux Arts in Paris is shown on the other side of this sheet. The freedom and expressiveness of the pencil work is worthy of note. The architectural forms are drawn in a way that shows the possession of a rich store of architectural knowledge by the designer and a remarkable ability to visualize his design. Other drawings by Mr. Bennett can be found in the August issue in the article Master Draftsmen, XIV, Edward Bennett.

PENCIL POINTS

VOL. VI, No. 9

PLATE XXXV



ETCHING BY EMIL FUCHS.

An extremely fine life study is the etching by Emil Fuchs reproduced on the other side of this sheet. The way in which the figure has been expressed by the use of sensitively drawn outlines almost exclusively is deserving of careful study. These outlines suggest the character of the surfaces they bound, a most difficult thing to accomplish.

PENCIL POINTS

VOL. VI, No. 9

PLATE XXXVI



DRAWING BY WALTER B. CHAMBERS
MT. ST. MICHEL.

A quaint bit of Mt. St. Michel is well rendered in the drawing by Walter B. Chambers shown on the other side of this sheet. This drawing was made in 1889 on one of Mr. Chamber's early trips abroad. It shows a delightful study, as well as earnestness—the kind of drawing that it is well for a student to make. Another of Mr. Chamber's sketches of Mt. St. Michel appeared in the previous issue.

PENCIL POINTS



*Section—The Design Winning the Competition for the Selection of an Architect for the Harding Memorial,
Henry Hornbostel and Eric Fisher Wood, Architects.*

HENRY HORNBOSTEL AND ERIC FISHER WOOD WIN COMPETITION FOR HARDING MEMORIAL.

THE commission to design the mausoleum to be erected in memory of President Harding, at Marion, Ohio, has been awarded to Henry Hornbostel and Eric Fisher Wood. The Jury of Award met on July 20, at the offices of the professional advisor to the Harding Memorial Association, E. P. Mellon, of New York, to consider the designs submitted by the architects, architectural firms and associated architects who had been invited to take part in this competition, namely: Messrs. Paul Phillippe Cret, of Philadelphia, Pa.; Henry Hornbostel and Eric Fisher Wood of Pittsburgh, Pa.; John Russell Pope, of New York; and Egerton Swartwout of New York. It was the desire of the Executive Committee of the Association that the judgment be made upon the professional and artistic capacity of the author for dealing with this especial problem as regarded from all points of view, including that of cost.

The program called for a memorial to be erected to Warren Gamaliel Harding by The Harding Memorial Association in the form of a mausoleum at Marion, Ohio. An area of ten acres is provided for the memorial but only that part of this lot that in the judgment of the competitor is desirable as a setting need be included in the design. The cost of the mausoleum, and all expenses incidental to the building, was fixed at six hundred thousand dollars. A. D. Taylor, of Cleveland, Ohio, has been

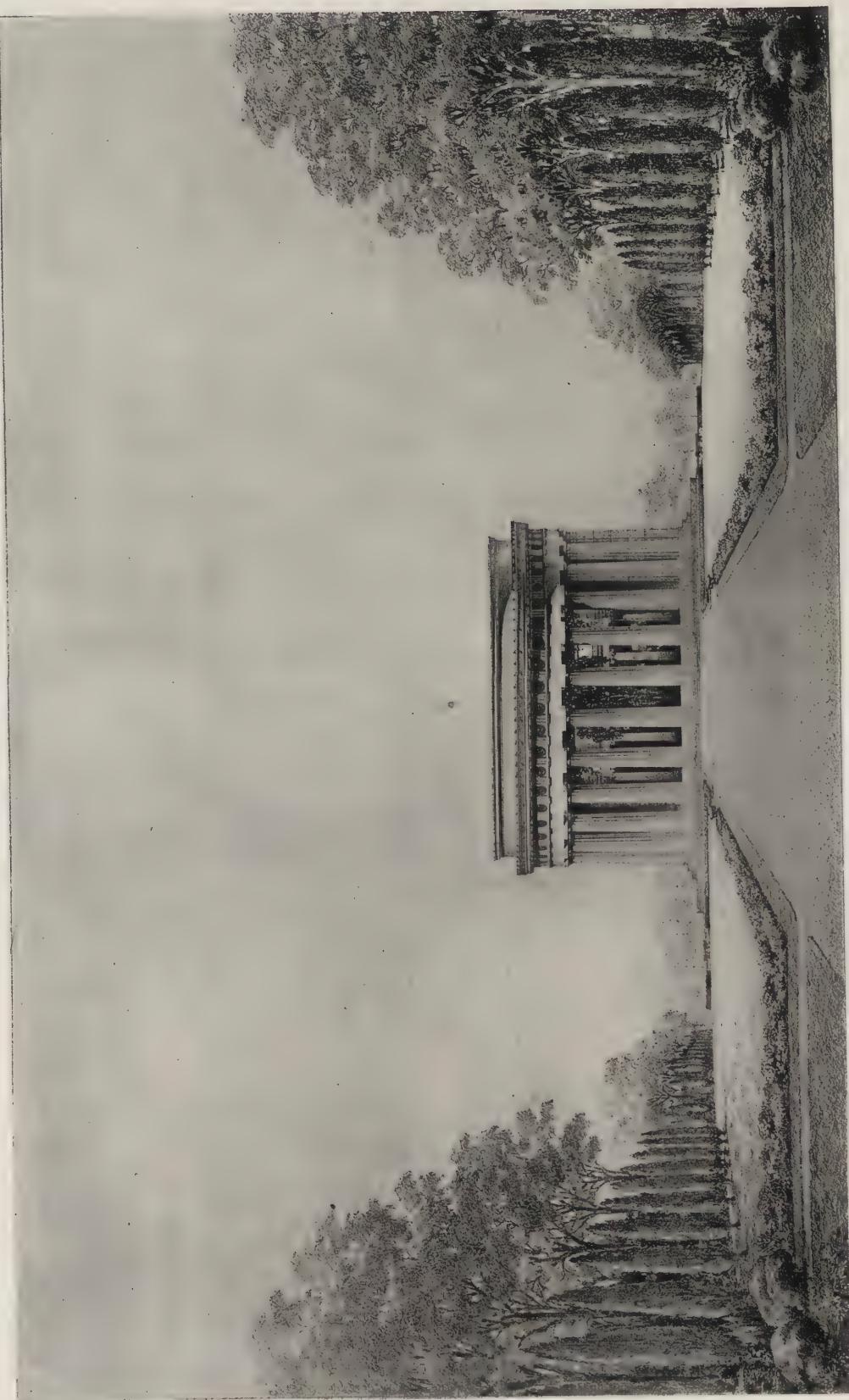
designated by the Harding Memorial Association as landscape architect. It is understood that, although the landscape architect is engaged and paid by the owner, his function shall be distinctly subordinated to that of the architect of the mausoleum and that the landscape architect shall cooperate with him in designing the treatment of the site and of the roads leading to it. The drawings called for by the terms of the program were:

- A. A general plan showing the mausoleum in block form and the treatment of the approaches at the scale of 1/40 in., rendered.
- B. A plan of mausoleum at entrance level or, if desired, showing one-half at that level, the other half at an upper or lower level, at the scale of 1/8 in., not rendered.
- C. One main elevation at the scale of 1/8 in., rendered.
- D. Another elevation at 1/8 in., not rendered.
- E. A section through the mausoleum at the scale of 1/8 in., rendered.
- F. A cubage diagram on tracing cloth, agreeing in all respects with the dimensions of the building as shown in the design, and showing these dimensions in figures, with schedules giving the area, height and volume of each part to be included in computation of volume and their total in cubic feet.

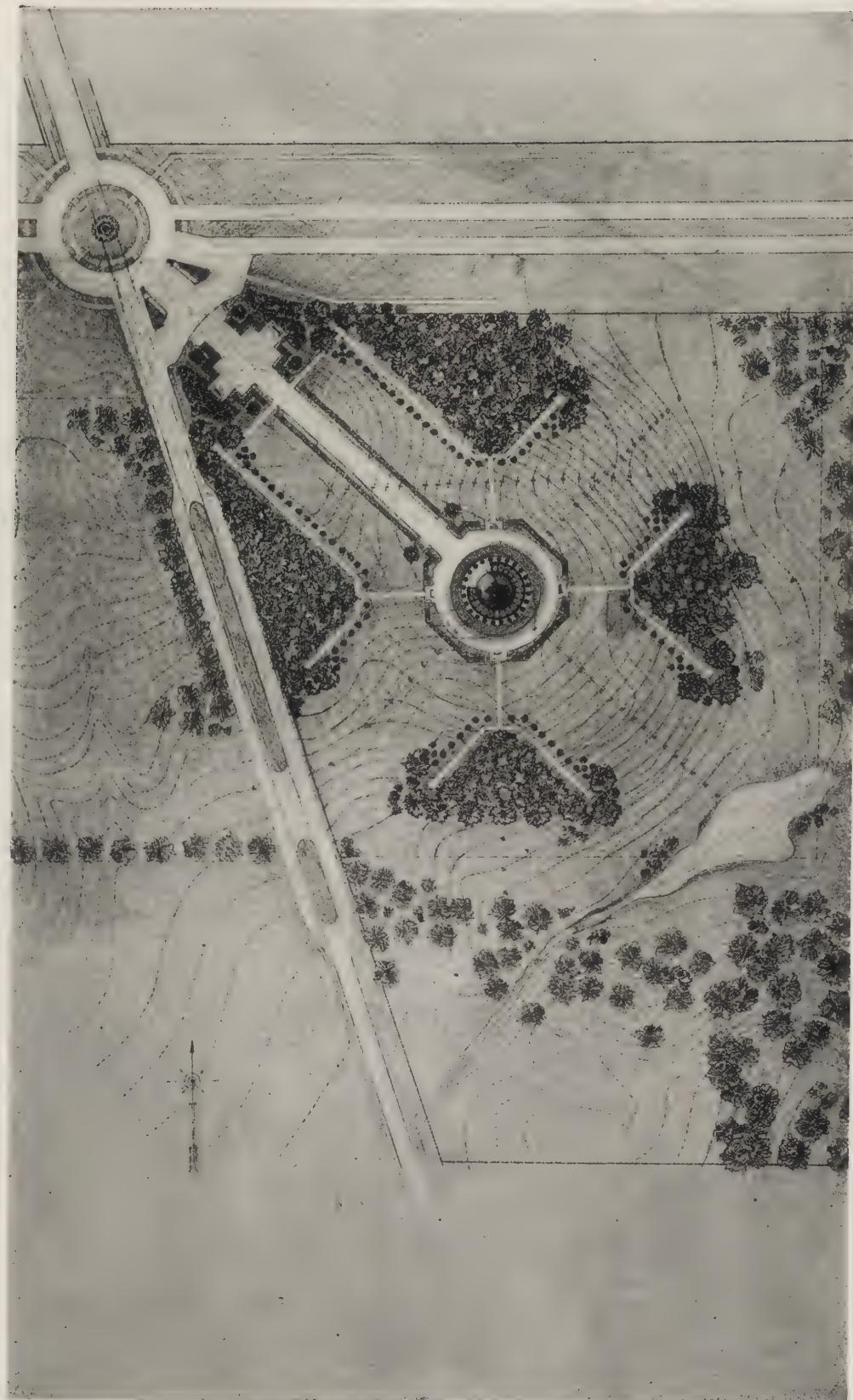
The three drawings noted above as rendered to be essentially in monochrome, elevations and sections to show a single human figure 5 ft. 8 in. high.

On pages 65 through 73 we reproduce three of the rendered drawings from the set submitted by each of the competitors in this competition.

*The Design Winning the Competition for the Selection of an Architect for the Harding Memorial,
Henry Hornbostel and Eric Fisher Wood, Architects.*



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Plot Plan—The Design Winning the Competition for the Selection of an Architect for the Harding Memorial, Henry Hornbostel and Eric Fisher Wood, Architects.

Design Submitted by John Russell Pope in the Competition for the Selection of an Architect for the Harding Memorial.



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Section.



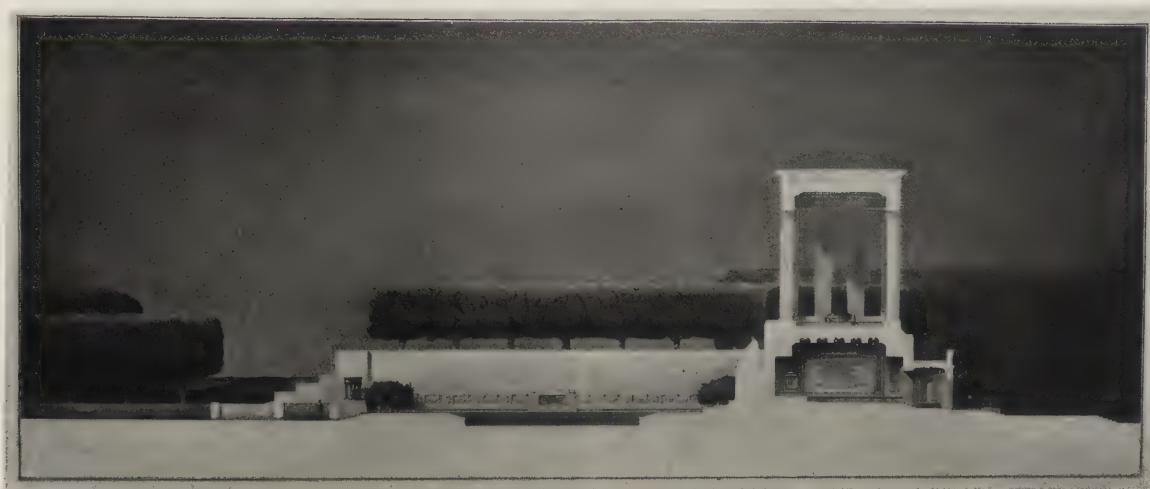
Plot Plan.

Design Submitted by John Russell Pope in the Competition for the Selection of an Architect for the Harding Memorial.

Design Submitted by Paul P. Cret in the Competition for the Selection of an Architect for the Harding Memorial.



PENCIL POINTS



Section.



Plot Plan.

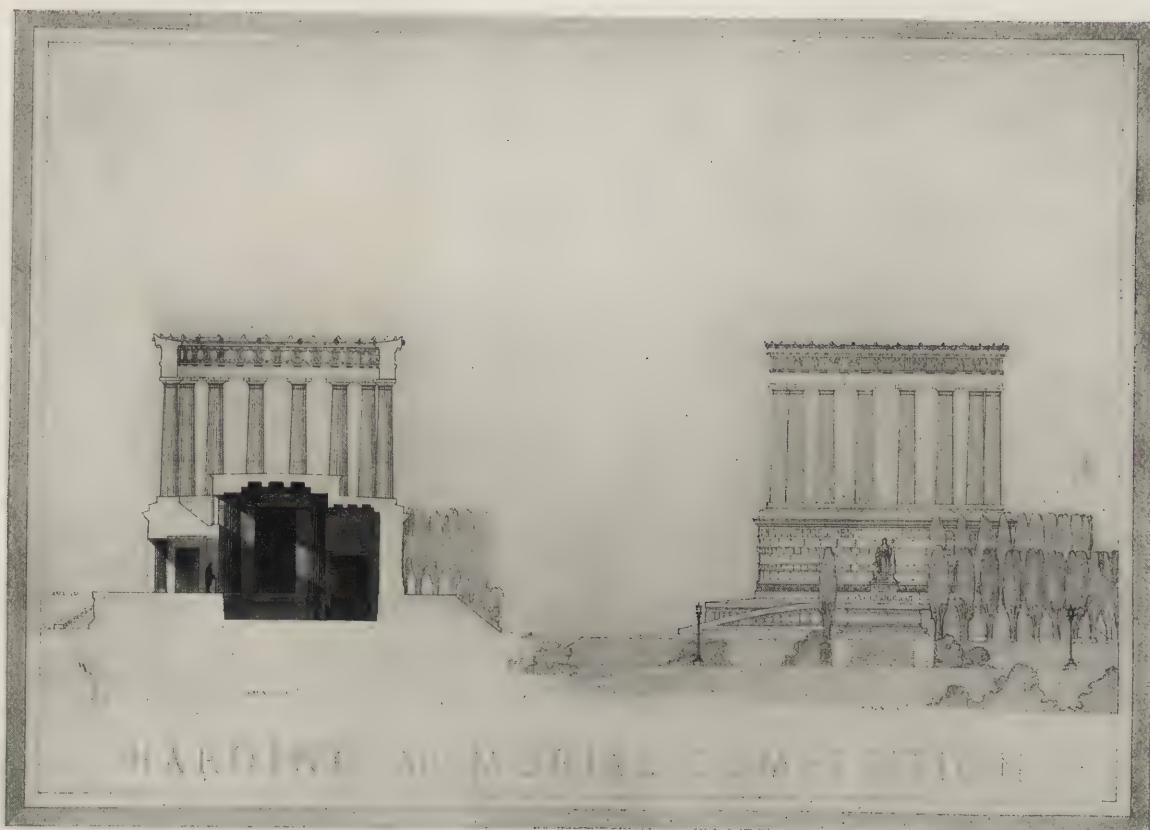
Design Submitted by Paul P. Cret in the Competition for the Selection of an Architect for the Harding Memorial.

HARDING MEMORIAL



Design Submitted by Egerton Swartwout in the Competition for the Selection of an Architect for the Harding Memorial.

PENCIL POINTS



Section.



Plot Plan.

*Design Submitted by Egerton Swartwout in the Competition for the Selection of
an Architect for the Harding Memorial.*

PENCIL POINTS



Figure 1. Drawing by Emanuel Brune. "Fragments Divers," Cori.

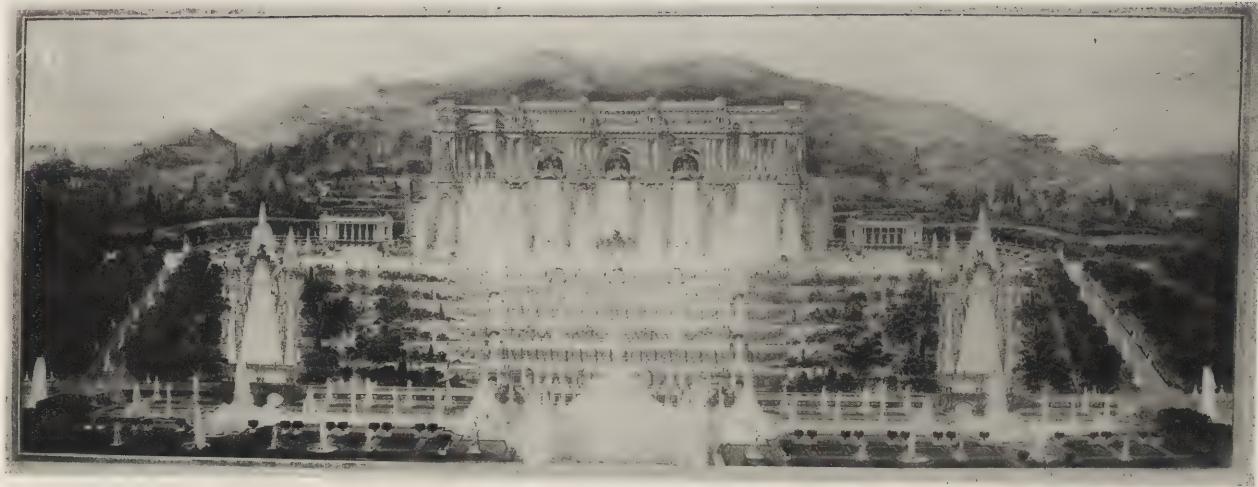


Figure 13. *Chateau d'Eau, Grand Prix de Rome Design* by Camille Lefèvre.

THE TECHNIQUE OF RENDERING, PART IX

BY FRANCIS S. SWALES

In the serial article of which this is the ninth installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work.—EDITOR.

THE brilliant *piqueage* of Mr. Magonigle's drawings of the Kansas City Peace Memorial*, made to present as forcefully as possible the artist's conception of the general treatment of a great monumental group of buildings, brings to attention the strong part that foliage and other naturalistic elements may play in the effective presentation of the ideas and feeling of the designer. The dramatic touch of the artificial lighting of the procession in the foreground of the perspective, the vivid impression of sunlight brought about by the dark points of foliage so placed as to force the white surfaces of the masonry at the base of the elevation; the sharp accentuation of naturalistic points of the foreground, and the architectural lines of the formal clipped trees, which become part of the monumental design that is within the entourage of naturalistic setting, convince the beholder that not alone the architecture but the landscape, sculpture and qualities requisite to the artist-painter are combined in the thoughts and expressiveness of the designer.

The part which foliage may take in the effectiveness of a presentation drawing is a common cause of questions as to advisability. The general theory of teachers of architecture inclines to avoidance of anything naturalistic in combination with the orthographic projectional drawings of architecture. Yet Emanuel Brune, one of the great exponents of that theory and one of the greatest masters of technique himself, resorted to at least suggestions of the combination as in the background of his composition of "Fragments Divers" at Cori (Figure 1), in which the mountain town and suggestion of clouded sky take the part of the back-drop of the stage. But Brune's drawings, while displaying a painter's feeling for lighting and perspective and

containing elements of an artist's imagination (as all French restorations of the antique do), are primarily drawings to record facts, or near-facts. The doorway of the Doric Temple (Figure 2), a severe academic study, is relieved of harshness by the naturalistic softening of the shadow of the console at the right and a touch of diffused shade over the left corner creating a sense of space behind the mechanical border framing the drawing. Again in his masterly study of the "Details of the Doric Temple" the glazing of the drawing with strong graded washes of depositing pigment give a naturalistic effect to the texture of the tile roof (Figure 3) and the surfaces of the stonework (Figure 4). The strong settling washes conceal to a great degree the labor showing through the mask of facility. Thus, on the curve of the crown mould of the cornice we can perceive ten parallel washes used to produce the effect of mingling light and shade and the varying degrees of reflected light upon the small horizontal bands in the frieze enable us to know that at least five washes were carried over the lighter parts and nine over the parts in shadow, and all were carefully graded. The small cyma below the crown moulding is ruled off into nine parallel lines and seven separate washes used to produce the lighting effect before the heavy glazing wash, giving to the surface the technique of the water-colorist—the sure touch and right tone with the first brush full—was applied. The study of the Corinthian capital and base (Figure 5) shows prodigious technical work. On the lower torus of the base no less than sixteen bands of diagonal washes can be counted in the shadows above the "white" line spared between the shade and shadow. Only portions of the drawing have been glazed with a softening wash; but

(Continued on Page 82)

* Illustrated in August, 1924.

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Figure 2. Drawing by Emanuel Brune. Doric Temple, Cori.



Figure 3. Drawing by Emanuel Brune. Details of Doric Temple, Cori.

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Figure 4. Drawing by Emanuel Brune. Detail of Order, Doric Temple, Cori.

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Figure 5. Drawing by Emanuel Brune. Detail, Corinthian Order, Cori.

Figure 7. A Baptistry, Rougovin Prize 1891. Design by A. Guibert.





Figure 6. 1st Medal Design by Frederick Hirons, "Concours Godeboeuf—Une Descente à Convért."

PENCIL POINTS

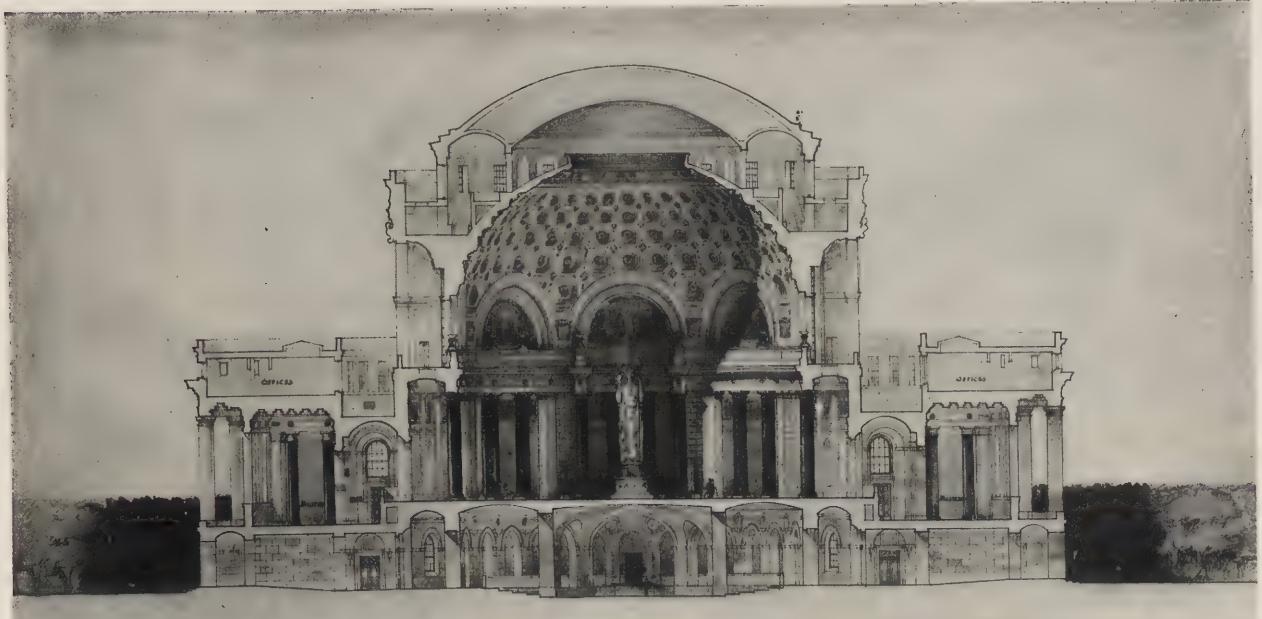


Figure 9. Section—War Memorial Museum, New York. Design by Francis S. Swales, Architect.

(Continued from Page 75)

it has been applied with so much knowledge and skill that the whole rendering seems to have been made with that one final touch—as though genius had covered with a natural touch of age the brand new labors of the hard working mechanic and given it life, as in the story of Pygmalion and Galatea.

The objection to naturalistic effect in connection with the conventional orthographic projection then, must be limited to specific effects which detract from, rather than add to, the architectural character.

Thus, in a study in which detail is of primary interest as, for example, (Figure 6) Mr. Hirons' design for a covered entrance, any introduction of foliage would compete with the interest intended to be centered in the ornamentation while figures in "street clothes" would detract, particularly, from the sculptural decoration. When, as in this case, the drawing is made for the purpose of showing progress in architectural study, the jury is concerned in the design for the given subject only; and in a subject of such minor extent the setting, or color, is of little consequence. Similarly in a subject such as Mr. A. Guibert's prize drawing design for a "Baptistry" (Figure 7) in which the colored decoration is of first importance and the scale of the interior obvious, the introduction of naturalistic figures could do nothing but disturb the composition. But when the subject goes beyond the questions of detail and proportions, and more especially the location or purpose of the proposed building is such as to call for the consideration of the architecture as the complement to the landscape, the feeling must be strong that we should like to be assured that the landscape will do its part as complement. As soon as landscape becomes part of "the picture" it becomes necessary to consider how far the naturalism of the entourage may be carried in combination with

the necessary conventionalism of the architectural representation. Shall the foliage be conventionalized so that it shall appear as simply a background or mass, or be so disposed as to make it an important part of the whole composition or picture? In Mr. Cret's student period, design for a small museum (Figure 8), the idea is obviously the latter. The general idea of forcing the strength of the white centre of the picture, thereby the solidity of the building, by the introduction of foreground trees is the same as in Mr. Magonigle's Kansas City Memorial drawings; but the detail work is not so far advanced. Here again is the mountain town "back-drop" of Brune's drawing (compare with Figure 1) but with the stage set with "profile cuts". The naturalism is conventionally indicated in a way that harmonizes well with the sense of the representation of the building—both are flat. The whole presentation is a remarkably good piece of student work. The use of foliage in similar conventional indication is useful in most of our practical problems for purposes of giving scale to large buildings, a mass against which to place the hard cuts of a section (Figure 9) and to set it forward as a whole, when the general rendering otherwise tends—as is usually the case with sections—to push forward the centre and kill the wings. This drawing, in carbon pencil, with the interior of the dome rendered in an orange (dark in the reproduction), caused the dome to seem to come away forward from the side wings until the dark foliage was added. This took some of the blackness out of the interior columns and intensified the effect of lighting from the interior courts.

Well rendered sections are the exception, not the rule, among architectural drawings. Usually left until the last thing in working up a competition they

(Continued on Page 86)



Figure 10. Portion of Drawing by Otto Eggers. Design Submitted by Office of John Russell Pope, Architect, in the Harding Memorial Competition.

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Figure 11. Drawing by Otto Eggers. Design for Harding Memorial.
Office of John Russell Pope, Architect.

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Figure 12. Drawing by Otto Eggers. Portion of the Rendering of the Elevation Submitted by the Office of John Russell Pope, Architect, in the Harding Memorial Competition.

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Figure 8. Design for a Small Museum by Paul P. Cret.

(Continued from Page 82)

more often betray the weaknesses instead of showing the strength of the design. The problem of showing the actual lighting, while maintaining the conventional shadows from light assumed to come at the angle of the diagonal of a cube, is one of the usual difficulties. Another is to show the reflected light that would come from the floor without breaking the interior into a mass of spots. Still another is how to show such a centrally located mass as the font (Figure 7) in Mr. Guibert's "Baptistry", or the tomb in the drawing for the Harding Memorial (Figure 10) by Mr. Eggers. In both cases half of the central feature, if shown in elevation, must project forward from the plane of the cut of the section, and would be, therefore, in full sunlight and the most advanced point in the drawing. Yet another difficulty, especially if the building is round in plan, is to keep the outside wall, or column, from appearing to recede from its proper place and plane. This last difficulty can be overcome by the introduction of foliage of a tone of "grey" darker than any part of the building structure. In Mr. Eggers' drawing the washes have been given a charming *piqueage* of pencil work suggesting the leafage just enough to give a contrast of texture between it and the masonry of the architecture.

The late George B. Post, in opposing the submission of perspective drawings in competitions, raised the objection that whoever was (at that time) successful in obtaining the services of Mr. Hughson Hawley to render his perspective was usually suc-

cessful also in winning the competition. That was in the good old days when a majority of members of the jury were laymen. Nowadays it takes a great deal more than presentation to win with juries familiar with the best that can be done in rendering both the architecture and the entourage, otherwise Mr. Post's objection might be applied to Mr. Eggers. In the drawings for the Harding Memorial he was in great form and, whether we study only the rendering of the architecture (Figure 11) or the foliage and water (Figure 12), the part is as fine as the whole, and each a splendid model for the industrious student to follow, and to have a reproduction at hand when making an attempt at emulation. In a subject such as the Harding Memorial the planting is almost as important as the architecture. In most memorials it is more so because it often serves to hide architecture that is at its best when mostly "planted out".

The location of the building and its use will often, of course, determine whether the architecture should or should not be shown with accessories of landscape. For example, take the *Prix de Rome* design of Mr. Camille Lefèvre (Figure 13). The subject, a *château d'eau*—reservoir—with fountains for aération of the water: Mr. Lefèvre's chief competitor showed the architecture without the water, and rather neglected the landscape, contending that Versailles was better without its fountains than with them. Yet part of the problem was surely to design the arrangement of water and landscape to which, as Mr. Lefèvre evidently considered, the architecture of the structures was secondary.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME.

FROM letters recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Professor in Charge, School of Fine Arts we quote the following:

"With the exception of one or two of the Fellows, all the men have undertaken travel during the month.

"Henri G. Marceau, architect, and Randall Thompson, composer, have concluded their Fellowships as far as residence at the Academy is concerned. Both men are to spend the remaining months of their incumbency traveling in Italy, France and England.

"Deam, second-year architect, and Finley, first-year painter, have concluded their tour of Spain. They have written very enthusiastically to us of their impressions. They will arrive shortly at the Academy after making some stops on the way south from Genoa.

"Douglas, first-year architect, is taking a cure at a sanatorium in Switzerland.

"Norman T. Newton, landscape architect, has left for a survey of the gardens of Northern Italy, France and England. Lawrence T. Stevens is visiting Southern France.

"Mr. Blashfield's visit to Rome and the Academy was

one of the pleasant experiences of the month. Two former sculptors, Thomas Hudson Jones and Albin Polasek, stayed with us for a few days, at different times. It is very gratifying to listen to the encouragement that these men bring to us regarding the work for which the Academy stands, and to have them express most emphatically their own appreciation of what it has all meant to them, as well as what it must continue to mean to every man blessed with the opportunity to participate in the inspirational environment that the American Academy in Rome affords."

From Gorham P. Stevens, Director, we quote the following:

"The Academy has suffered a great loss in the death of Professor C. Densmore Curtis, which occurred on June 7th, after an illness of four weeks. In spite of the best possible doctors and nurses his life could not be saved. He was buried in the Protestant cemetery here, just back of Prof. Tracy Peck and in the same row with Mr. Crowninshield. He had been working very hard upon an article on "Sardinian Jewelry", the MS. of which was in such excellent condition that Prof. Frank could turn it over to the publisher with full confidence that the book will be as Prof. Curtis would have wished it. It is hard to think that we shall not have Prof. Curtis with us in the future. He had made a place for himself in the archaeological world and also in the hearts of all those who knew him.

"The appointment of Mr. W. S. Richardson as annual professor in the School of Fine Arts for next year is an extremely happy one. He has not been well enough as yet to discuss the matter with me, however. With sculptor Proctor also with us next year, American arts should be well represented at the Academy.

"Prof. Kelsey is having a full-size copy made of one of the famous rooms at Pompeii. The copy of the room is to be installed at the University of Michigan.

"Mr. Edwin H. Blashfield has spent some time at the Academy going over the mosaics for St. Matthew's Church, Washington, D. C. The mosaics are finished and boxed and are to be shipped in a few days. We shall be sorry to lose Mr. Lascari, for, in addition to this important mosaic commission, which he has been working up, he has been a great help to the painters at the Academy. Among the visitors who were especially interested in these mosaics was Mr. Nicholas F. Brady of New York. Before leaving Rome, Mr. Blashfield invited many of us to a sumptuous dinner at an Italian restaurant in town.

"Gifts, as follows, have been received:

"From Dr. Thomas Ashby an important collection of brick-stamps, stuccos and prehistoric objects.

Alfred E. Hamill presented 500 lire for the Library.

From Mrs. A. Cohn \$100 for the Department of Music.

"Professor Showerman, Director of the Summer School, is to arrive in Rome to-morrow, and on the 6th to begin his lectures. Sixty people seem a large number for one professor to handle, but Prof. Showerman will prove equal to the occasion."



Jury of Award for the Harding Memorial Competition: Wm. S. Wagner, Senator Joseph Frelinghuysen, John Mead Howells, Secretary of the Treasury Mellon, Charles M. Schwab and George Howe.

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GEORGE FRASER

GEORGE FRASER, recently awarded the Rome Prize, was born at St. Paul, Minn., and received his undergraduate work and a B.S. degree at the University of Minnesota. In 1920-21 he took his graduate work at Cornell University and is the holder of a Master of Architecture degree from that University. After leaving Cornell, Mr. Fraser was a member of the Ohio State Faculty, returning to Cornell in 1923, where he has been a Professor of Design for two years. Mr. Fraser is a member of Phi Kappa Phi, Tau Sigma Delta, Savage Club, Gargoyle, L'Origine and Delta Chi. Mr. Fraser feels that he is greatly indebted to Prof F. H. Bosworth, Jr., of Cornell, and Prof. Roy Childs Jones of Minnesota. He will sail shortly to take up his studies at the American Academy in Rome where he will remain for three years.

A NEW ATELIER

D. Varon, Architect, 128 Madison Avenue, New York, announces that he will this Fall start an atelier where students may receive careful individual attention in their studies. Full particulars may be secured from Mr. Varon.

CONSTRUCTION USES OF SHORT LENGTHS OF LUMBER

AMONG the possible economies pointed out in the *Report of Survey by the Department of Commerce and General Committee on Lumber Standards* is the avoidance of the practice of lapping joists past each other on the girder or bearing plate. One house examined had 12% waste from this cause. Most of this could have been avoided had odd lengths been available. Where a large number of houses were being built in a row, with party walls, on lots 17' wide, joist and rafters had been cut from 18' lengths with a loss of 6% until a dealer procured 17' lengths. In the case of a house requiring 16' 6" rafters, where these were cut from 18' lengths, the waste was 8.3% which a 17' length would have reduced to 2.95%. In broken roofs such as hip, jirkenhead and valley, more short lengths are required than for a plain gable roof. As the former generally have a better appearance than the latter the report recommends the building of this type and of gable roofs with dormers.

If, instead of setting up the studs on the outside of a balloon frame the full length and cutting out window and door openings after sufficient sheathing had been nailed on to support the short pieces of studs, the studs had been cut accurately to length before assembling, a considerable saving could be accomplished. In the platform type it was found that the greatest amount of shorts was used but that these pieces were cut from 16' lengths. It is suggested that standard length studs be used of, probably, 7' 9", 8' 3", 8' 6", which would be a sufficient range to cover houses as usually constructed.

The place where a large number of short lengths was utilized was in sheathing, as a large percentage of the long lengths delivered on the job were cut to go between window and door openings. Economies have been affected, according to this report, by the use of car roofers 1 x 6 matched 5' 0 1/2" long, the studs being especially spaced to take this length. The report calls attention to the fact that the short lengths are more easily handled on roofs when the wind is blowing and that they can be applied much quicker if cut to exact length in multiples of 2', the rafters being spaced this distance.

Sub-flooring is another place where short lengths can be utilized. Laying the sub-floor at 45° to the joist uses a greater quantity of material, variously estimated at from 5% to 20%. A case where the sub-flooring was laid at an angle of 72 1/2° was cited as producing satisfactory results with no more material than when the floor was laid at 90° to the joist.

There is some objection to using butt joints in porch flooring due to the liability of their retaining moisture, thus causing decay. As most porches are about 8' wide it would seem inadvisable to purchase this in shorter lengths.

Ceilings were found to contain more short lengths than any other item and it was found that 15" pieces were cut from 18' lengths. The practice of cutting these short pieces was common in nearly every job surveyed, though the lengths cut from were usually from 8' to 16'. A case is cited of using 8' car siding for ceiling, being spaced 2' on centers. In the opinion of several builders flooring should be made in multiples of 16" especially those pieces under 8'. A table showing construction use of short lengths of lumber is printed below.

CONSTRUCTION USES OF SHORT LENGTHS OF LUMBER

BASED ON MEASUREMENTS OF 46,642 PIECES

	OVER 9 FEET						8 TO 9 FEET BOTH INCLUSIVE						UNDER 8 FEET					
	PERCENT						PERCENT						PERCENT					
	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
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STUDS	████	████	████	████	████	████	████	████	████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
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DEPARTMENT OF COMMERCE
AND
CENTRAL COMMITTEE ON LUMBER STANDARDS
F. K. DAWSON - SPECIAL AGENT

PENCIL POINTS

BOGUS SUBSCRIPTION AGENT CONVICTED!



William H. Sibley.

land, Ontario, under the name of William H. Lander. After remaining there a week, he left suddenly owing a hotel bill of \$35.00

In July 1922 he went to Galt, Ontario, and began business under the name of William Sibley—The Empire Press, selling subscriptions for the *Architectural Forum*,—which he later sent in from Bridgeburg, Ontario, with a worthless check signed by "W. L. Hitchens".

After remaining in Galt for a month, he defrauded the Y. M. C. A. for four weeks' room rent by giving them a worthless check. His next appearance was in Buffalo, N. Y., where on Oct. 9, 1922, he was arrested under the names of W. H. Sillibley, alias W. H. Linder, alias W. H. Ball, on a charge of forgery 3rd degree, and sentenced to three months in the Erie County Penitentiary—sentence suspended and ordered out of city.

In 1923, he again operated in Buffalo under the name of G. W. H. Ball, selling subscriptions for PENCIL POINTS, etc. etc.

During the latter part of 1923, he went to Rochester, N. Y., and collected money for subscriptions for PENCIL POINTS under the name of W. L. Hitchens, and later sent them in with a worthless check signed "W. H. Lander".

In 1924, he sold subscriptions in Ottawa and Montreal, Canada, under the name of W. L. Hitchens, and later sent them in with a worthless check signed "William Sibley".

In the Fall of 1924, he went to England and sold subscriptions for PENCIL POINTS at five dollars each (the regular price being only three dollars) under the names of E. Lane and E. Mathews, neglecting to send in any money for any of them, being so forgetful in such matters.

Returning to America in the Spring of 1925, he made his first appearance at Bridgeburg, Ontario, where he roomed for a month (March-April) under the name of G. W. H. Ball.

In June 1925, he transferred his activities to Niagara Falls, Ontario, where he registered at the Hotel Trennick under the name of W. H. Lander. After remaining there a week he gave as payment for his hotel bill a worthless check drawn to W. H. Lander and signed "G. W. H. Ball".

On June 25, 1925, he registered at the Y. M. C. A. in Hamilton, Ontario, as W. L. Hitchens, hired a typewriter for a month and proceeded to work the town.

One of his little pleasantries in Hamilton was to sell a subscription for the *Architectural Forum* in payment for which he received a check made payable to G. W. H. Ball, explaining that this was the man for whom he worked in Buffalo. This check was endorsed and cashed at the Bank in Hamilton on the same day he received it—July 4th. After committing several other minor depredations in Hamilton, he was arrested, convicted and sentenced to two years' imprisonment, after pleading guilty to five charges of theft.

His previous criminal record as furnished by the Periodical Publishers' Association of America is as follows:—

Extract No. 1.—SIBLEY, WILLIAM B.—See Bennett, J. B.

Extract No. 2—BENNETT, J. B.—Reported in Bulletin No. 14, page 118—Alias Wm. Lander, A. B. Jones, Miss E. M. Norton, Mrs. L. B. Bradley, W. G. Maynard, C. J. Leonard, Otto J. Trevelyan—After jumping his bail in May, 1914, in Waterbury, Conn., he started out on his career as before, viz.: securing fraudulent subscriptions and remitting with checks that were N. G. Worked throughout Connecticut. Arrested in Poughkeepsie, June 1916, and sentenced to serve ten days. He was taken to New Rochelle and was sentenced on June 21, 1916, to serve 11 months and 29 days for passing worthless checks.

If you have been defrauded in any manner by this man please send particulars to this office, also

B E W A R E :

WE HAVE NO TRAVELLING SUBSCRIPTION AGENTS,

Do not subscribe for PENCIL POINTS through any one not known personally to yourself.

NATIONAL EXPOSITION OF POWER AND MECHANICAL ENGINEERING

THE Fourth National Exposition of Power and Mechanical Engineering will be held in the Grand Central Palace, New York, from November 30th through December 5th, 1925. This exposition is an important clearing house of information for the executives and engineers of all industries. At the coming show a series of exhibits of heating and ventilating machinery will form an important addition to the lines usually represented. The heating and ventilating problem is closely allied to the power problem of an industry and the advances in one art are generally applicable to the other. This innovation at the coming Show will, therefore, increase its value to the visitors who will find much of real worth in the exhibits of all phases of the heating and ventilating art. The Annual Meetings of The American Society of Mechanical Engineers and The American Society of Refrigerating Engineers will be held during the week of the Show. The managers of the Show are Fred W. Payne and Charles W. Roth, with offices in the Grand Central Palace, New York.

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Answer to Puzzle Appearing on Page 96-f

PENCIL POINTS

ARCHITECTURAL TENNIS TOURNAMENT

THE draw for the annual Architectural Tennis Tournament for the William Adams Delano trophy was made on August 1st and at the present time the playing is well under way.

Departing from the procedure of last year, the tournament is being run on the elimination basis, with a consolation tournament for those men defeated in the preliminary and first rounds, affording each man at least two matches. There were 48 entries in the singles representing 25 different offices; the following men being ceded:

N. W. McBurney	Peabody, Wilson & Brown
A. M. Koch	J. E. R. Carpenter
H. W. Lawson	J. E. R. Carpenter
G. B. Kayser	Jas. G. Rogers

The draw for the doubles tournament, with fourteen teams entered, has also started and many good matches are expected.

The following prizes are to be awarded:

Singles Tournament

Winner—Delano trophy and solid gold medal
Runner Up—Gold Filled Medal
Semi-Finalists—Silver Medals
Qualifying Round—Bronze Medals

Doubles Tournament

Winners—Silver Cups
Runners up—Silver Medals

Consolation Tournament

Winners—Silver Medals
Runners up—Bronze Medals

The finals of the three tournaments will be played on September 27th, at Mr. William Adams Delano's estate at Syosset, L. I.



Trinity Church, New York. Pastel and Crayon Drawing by Theodore de Postels.



Sketch of the late King Edward by Emil Fuchs.

ROME PRIZE AWARDED

THE Rome Prize has recently been awarded to George Fraser and he has been appointed a Fellow in architecture. The award was made on a competitive basis, an eleven day preliminary competition was followed by a final one lasting four weeks. For the first competition the problem assigned was "A Monumental Entrance to a Park in a Large City". Of the twenty-three preliminary competitors ten were chosen for the finals, for which the subject was "A Design for a Stadium, Open Air Theatre and Water Gate for a University Situated on the Terrace of a River". This competition was held simultaneously at the University of California, Columbia, Cornell, Armour Institute, Chicago, and Ohio State University. The members of the Jury of Award were Wm. M. Kendall, Chairman, Louis Ayres, W. A. Delano, T. H. Ellett and Charles A. Platt. The stipend of the Fellowship is \$1,250 a year. Mr. Fraser will remain at the Academy in Rome for a term of three years.

MEDAL OF S.A.D.G.F. AWARDED TO CATHOLIC UNIVERSITY OF AMERICA

THE Medal, which is awarded every year by the American Group of the *Société des Architectes Diplômés par le Gouvernement Français* to the College or University obtaining the highest proportion of values in the work of the Beaux Arts Institute of Design, has been awarded to the Department of Architecture of the Catholic University of America, Washington, D. C. The Dean of the Department, Professor Frederick V. Murphy, was also the recipient of a personal letter of appreciation from the president of the Société, Mr. Chester Aldrich, following the announcement of the award through the Secretary, Mr. Edwin H. Danby.

PENCIL POINTS

WE ALWAYS like to get honest, first-hand expressions of opinion from our readers on any and all subjects in which they may be interested. We print here-with an anonymous letter and shall be glad to have the writer disclose his identity—in fact we invite him to call at our office to discuss the subject of his communication:—

"PENCIL POINTS is a fine publication and it has a very well worth while ideal. But, why doesn't it go right to the roots?—

"It is made up of part 'instruction to draftsmen as to craftsmanship'—and part 'sociability'.

"Why not have an editorial page where somebody will tell the draftsman the *plain truth* about the profession of architecture and the practice of it?

"And the *first, foremost and most important* message to them should be that—for the sake of their health, wealth and happiness—it is essential that they so prepare themselves while they are draftsmen working for someone else, that, when they 'hang out their own shingles' they won't have to 'practice' the profession. They will *know* it.

"There are so many things—thousands of them—that the draftsman can learn when he is working for someone else and that are so essential to his knowledge before he starts in for himself—yet that he doesn't learn, because nobody has ever taken the trouble to point them out to him.

"And so—he learns them, year after year—while he is in business for himself—and at the expense of his client—and his own self respect. Troubles with clients, who discover that the architect doesn't know. Troubles with contractors, who discover it before the clients do. Broken morale—broken health because of worry—precarious clientele—poor finances—paying for ignorance, etc.

"Why? Oh! Why?—shouldn't the draftsmen be told that they should learn 'building materials and methods'—'specification writing'—'supervision of construction' while they are 'working for somebody else'?

"Why should they be allowed to drift along in an office with the idea 'that's all there is to it'. To 'work for three or four years, and then start in business'.

"When, what they should be doing is following a regular schedule of '*what there is to learn before our start in business*'.

"Most of them would cut out the 'movies', auto rides, etc. and get down to business at once for they would see that getting there by just the day's work would be pretty slow business.

"There isn't one draftsman in a thousand who has any idea of what being a real architect entails or requires.

"Why leave these men to wake up at forty-five and realize that nobody bothered to set them right and that what they *might have learned in four years*—has taken them twenty and they have enough yet to learn to fill up the *next twenty*?"

"How about it, PENCIL POINTS?"

"P. S. Your first article in this month's (August) issue approaches the subject."

PERSONALS

CHAS. N. WHINSTON & BRO., ARCHITECTS, 2 Columbus Circle, New York, have opened an office in the First National Bank Bldg., Mount Vernon, N. Y., where all Westchester County work will be handled.

GWYNN OFFICER, has removed his offices to 2612 Regent Street, Berkeley, California.

JOHN M. HOWELLS, RAYMOND M. HOOD, ASSOCIATED ARCHITECTS, have removed their Chicago offices to the Tribune Tower, Tribune Square.

HARRY B. HOSTETTER, LANDSCAPE ARCHITECT, has removed his offices to the Conestoga Bank Building, Lancaster, Pa. W. D. BENES, ARCHITECT, has severed his connections with The Hubbell & Benes Co., and has opened an office at 1610 Euclid Avenue, Cleveland, O.

BRUCE H. WRIGHT and KENNETH F. NOXON have formed the firm of Wright and Noxon, Architects, and will continue their practice at 96 Bloor Street West, Toronto, Canada.

HERBERT JOHNSON BURKE is now a member of the firm of Smithey & Tardy, Architects and Engineers, 112 Kirk Avenue, W., Roanoke, Va., and will be associated with them in the general practice of architecture.

LEO M. BAUER, ARCHITECT, is now located at 535-536 Detroit Free Press Building, Detroit, Michigan.

B. LEO STEIF & COMPANY, ARCHITECTS, have removed their offices to the Bell Building, 307 Michigan Avenue North, Chicago, Ill.

MYRON E. PUGH has opened an office for the general practice of architecture at 111 South Hamilton St., Madison, Wis.

LOUIS C. ROSENBERG has recently returned from a thirteen months' trip in England and on the continent and has brought with him a number of delightful pencil drawings and etchings, some of which we shall be privileged to show in PENCIL POINTS. Mr. Rosenberg will be remembered by our readers as the winner of the Birch Burdette Long Competition for 1922.

DANIEL WENTWORTH WRIGHT has been granted a certificate to practice architecture in the State of New Jersey and he is now associated with Kenneth Whitney Dalzell in the general practice of architecture at Maplewood, N. J.

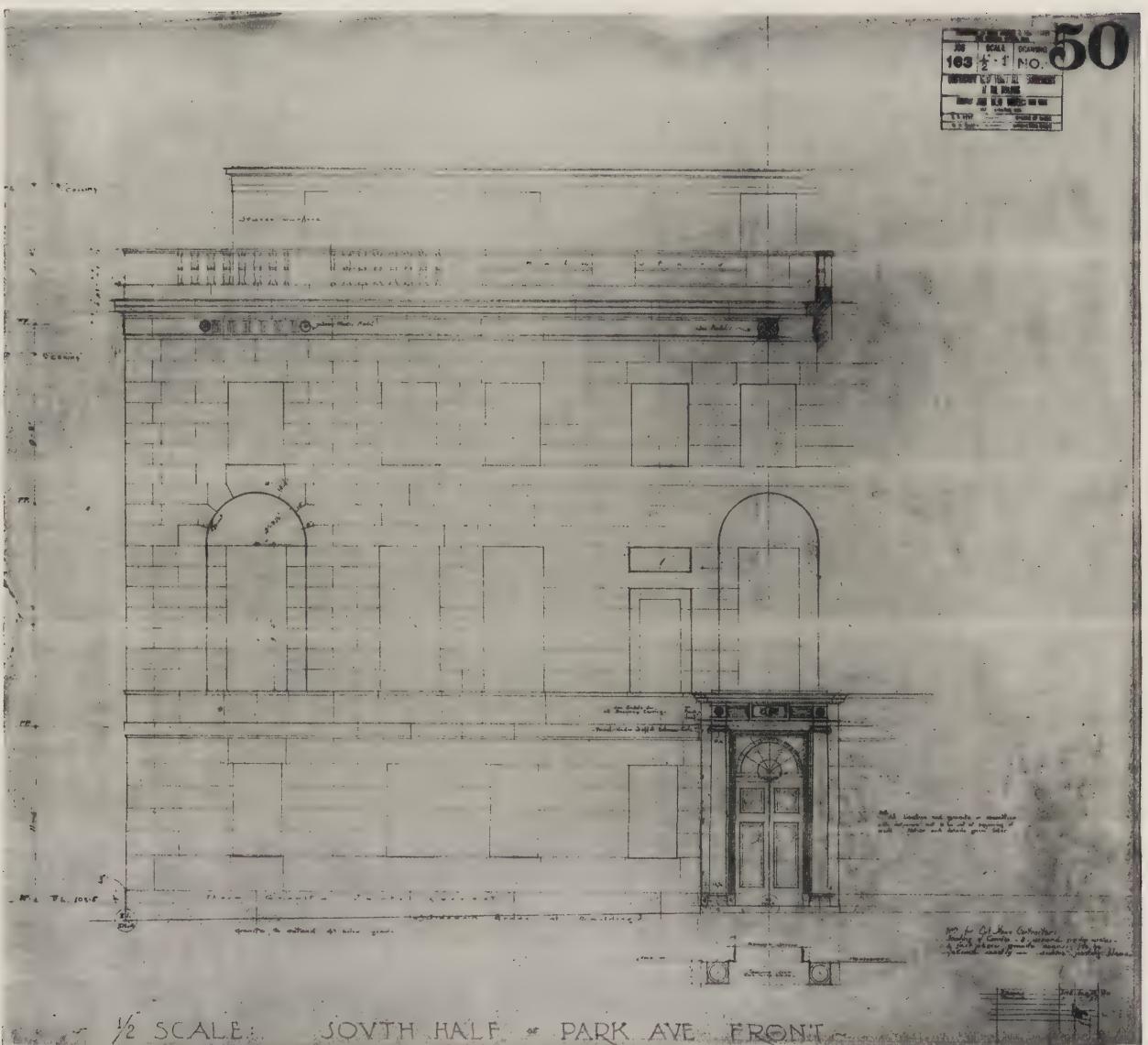
ALLAN B. BATES and EDWARD FRANKLIN, formerly with Charles Kreymborg and Son, Architects, have formed a partnership for the practice of architecture with offices at 645 East Tremont Ave., Bronx, N. Y.

ARTHUR W. COOTE of 101 Park Ave., New York, has opened an office at 123 N. E. Third Ave., Miami, Fla.



Sketch by Barry Faulkner, Beach of St. Malo, at low tide.

PENCIL POINTS



This working Drawing, Made in Pencil by Mr. Howells, when compared with the photograph on the opposite page, shows how exactly the appearance shown in the drawings is duplicated in the executed work.

PENCIL POINTS



Residence at the Northwest corner of Park Avenue and 75th Street (820 Park Avenue), John Mead Howells, Architect.
See drawing on the opposite page.

A COMPARISON OF DRAWINGS WITH THE EXECUTED WORK

HOW closely it is possible to study the composition of a work of architecture in the drawings is shown by comparison of the working drawings and photographs of the residence at 820 Park Avenue, New York, of which John Mead Howells was the architect. On page is reproduced a half elevation of the Park Avenue front of this building, while on page is shown a photograph of the completed structure. In this case the composition is practically in one plane and consists only of the fenestration and two horizontal lines, extreme simplicity and flatness were sought. The stone work was erected directly from Mr. Howells' drawing and, with the exception of the wooden canopies introduced in the windows and the iron grilles below, which were not shown, the effect of the drawing and of the executed work are exactly the same.

In order that the design of the doorway as drawn by Mr. Howells may be compared with the finished doorway, this portion of the drawing showing this detail is reproduced here at larger size (about the same size as on the original drawing, which is at the scale of $\frac{1}{4}$ "=1 ft.). This closer inspection shows that in detail as well as in general the elevation and the finished work are alike, a result much to be desired and that can be obtained only through full and proper study of the design and clear, correct indication of it on the drawing. In passing, it is interesting to note that, as a mezzanine floor goes through at the level of the stone transom bar the glass in the fan-light motive is of mirrors.

COMMITTEE ON "CUBING OF BUILDINGS" CREATED BY AMERICAN INSTITUTE OF ARCHITECTS

R EALIZING that differences now exist among architects, contractors, appraisal organizations, bonding companies, and others concerned with the size and approximate cost of buildings as to the methods used in

determining the cubical contents of any structure for estimating, appraisal and other purposes, the American Institute of Architects has appointed a committee to ascertain, codify and review the various methods now in use and prepare a report to the Scientific Research Department of the Institute.

This committee which is known as the "Sub-Committee on Cubing of Buildings" of the Structural Service Committee of the Institute is composed of D. Knickerbacker Boyd, Chairman, Dr. Warren P. Laird, Philadelphia and Dalton J. Snyder, Detroit.

It is the desire of the committee to receive the cooperation of all Associations, Companies and individual authorities in developing methods of cubing various buildings which may be accepted by the Building Industry and used by all as common basic factors.

Suggestions or information relating to this subject which will assist the committee and the industry will be welcomed. They should be sent to D. Knickerbacker Boyd, Chairman, 112 South 16th Street, Philadelphia, Penna.

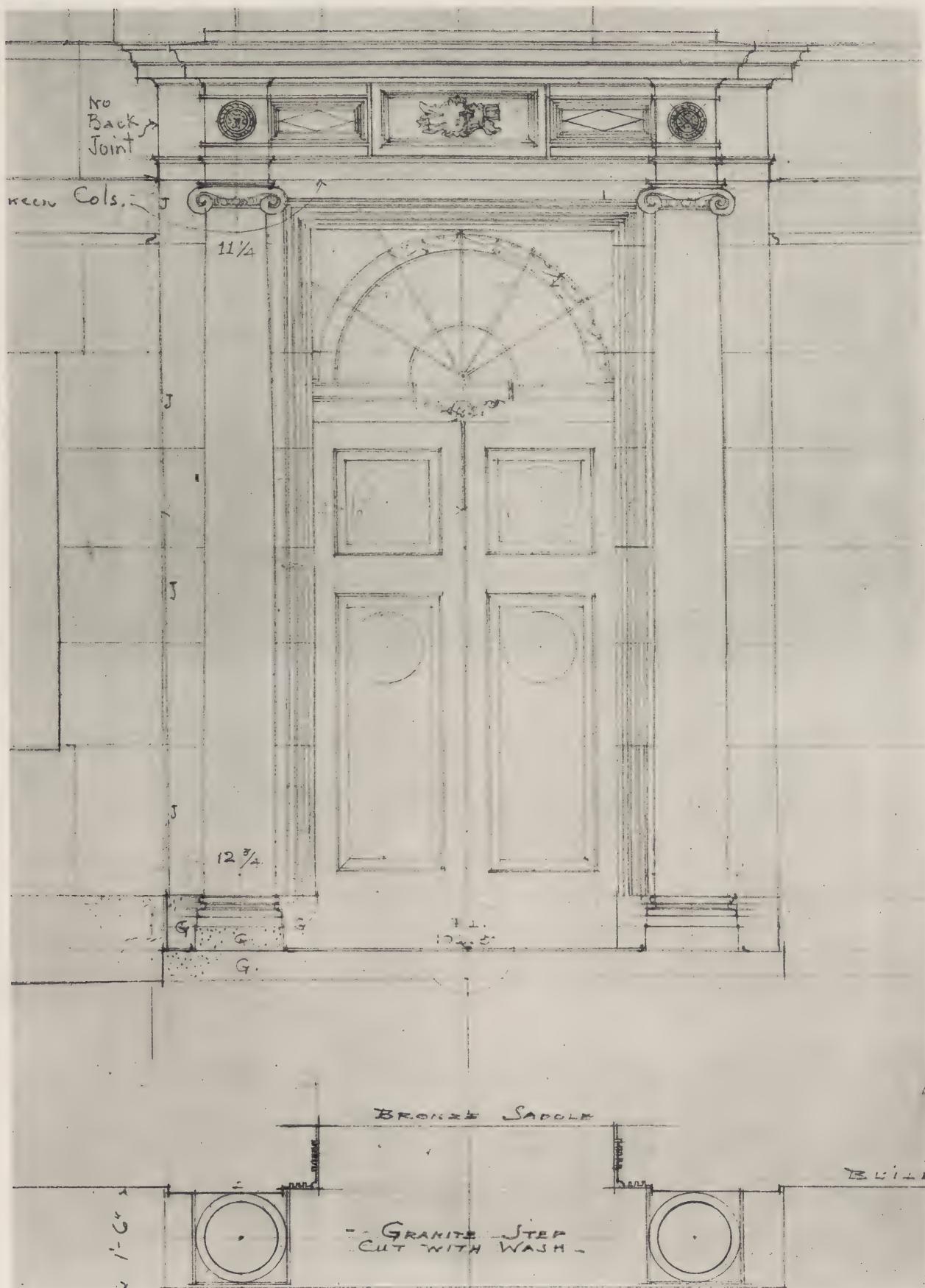
A FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(Other items on Pages 126 and 128)

Architectural draftsman, graduate of a European College, with $4\frac{1}{2}$ years' American experience on high class fire-proof apartment houses and commercial buildings desires connection with established firm in New York City. Box 134, Pencil Points.

Draftsman—Free Lance, in New York City, to trace floor plans from architect's blue prints for reproduction in renting booklets. Only those who understand mercantile and apartment building plans need apply. Must be excellent letterer, able to draw single stroke block letter without serifs. Can be done in spare time at home. Box 135, Pencil Points.

PENCIL POINTS



Elevation of Doorway. Residence at the Northwest corner of Park Avenue and 75th Street (820 Park Avenue), John Mead Howells, Architect. Portion of drawing on page 92 showing how exactly the finished work may resemble the working drawing.

PENCIL POINTS



Residence at the Northwest corner of Park Avenue and 75th Street (820 Park Avenue), John Mead Howells, Architect. See working drawing on the opposite page.

PENCIL POINTS

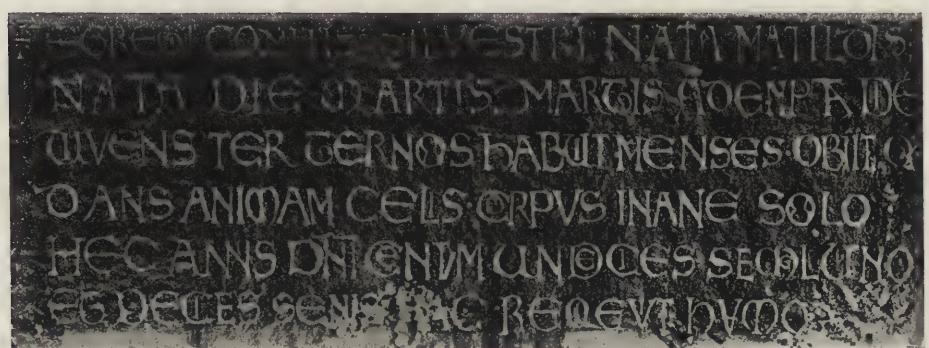


Figure 2.



Figure 1.

Rubbings Made by Otto F. Cerny.
(see text on opposite page).

PENCIL POINTS

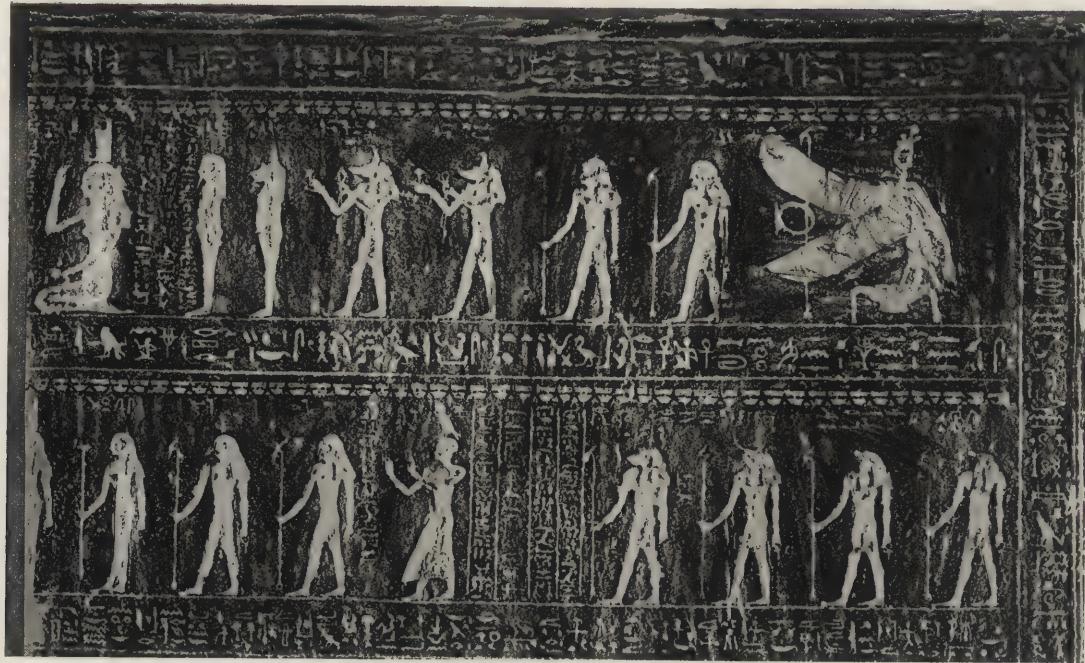


Figure 5. Rubbing made by Otto F. Cerny.

SOME INTERESTING RUBBINGS

A NUMBER of interesting rubbings, which we have selected from among those brought back by Otto F. Cerny from his travels as Le Brun scholar, are printed in these pages. In response to a request for information about these rubbings, Mr. Cerny has written us a letter from which we quote the following:

"Regarding your request for the identification of the rubbings, I beg to inform you that to simplify matters they have been numbered.

"The first is a pulpit built in 1161, and is placed in an old church about fifteen feet from the tower of Chiesa della Mortovana. It was very difficult to make the man in charge understand just what was desired, when I asked for permission to make this impression. Two lives and several demonstrations, together with the assurance that I did not want to purchase it, finally gave me the desired right on the following morrow in the absence of the priests. Due to my inexperience in making such copies, I was forced to hold the paper with one hand and rub with shoemakers' wax with the other.

"The second is an impression of a carved stone inserted on the inside wall of the same church.

"The third and fourth were taken from carved wooden confessional booths in an interesting modern Romanesque Church near via Piemonte and via Sal Lustiana, Rome. Mr. Cummings, of Australia, was with me and together we rubbed all of the ornament and then cut the sheet in two so that each of us had a copy of every piece of ornament.

"Number five was taken from one of the numerous tombs in the Cairo museum. My letter from the American Academy in Rome assisted me in obtaining permission to do this. Not having seen the process before, the officials gathered, asking what I used and where such a material could be obtained, which fortunately was found in Cairo. This, they later said, would be invaluable to them for recording. Recent acquisitions are not to be reproduced nor are those from 'King Tut's' tomb. The tombs average twenty-four feet in perimeter, so that a long piece of paper wound around and held by a string simplified matters. During the process of wrapping the paper around a tomb, an American lady inquired if they were sending it away, and if I would be so kind as to unwrap it so that she could give it one last look."

ANSWERS

IN ALL that has been said anent the subject of improvement in the income of the deserving draftsman, nothing has yet appeared that can be considered a real help to the individual.

It is like waving a red flag at a bull to remind one of these embryo-architects that he is a sight better off than the scrub-lady or that all department store hirelings cannot be Lords or Taylors.

That is in no sense to the point. The point is that, after one has spent eight or ten years in conscientiously educating and training himself in an honorable profession, it is a pity that he should discover himself to be no better off as to income than the building mechanic who can master his trade in a year or so, without education, and making wages meanwhile.

Undoubtedly, the law of supply and demand has much to do with both cases. The building mechanic, together with all other labor in the United States, has been vastly uplifted, as to wages, since the world war, by the curtailment of immigration brought about through political manipulation by organized labor.

How cleverly this has been effected is evidenced by the fact that both political parties are committed to our present immigration policy, notwithstanding the considerable havoc it has wrought the country over.

We are told (by the most subtle and insidious propaganda) that curtailment of immigration was necessary for just one reason—that we must cut down on the hordes of southern Europeans who would otherwise o'erwhelm us and imperil our very existence. Just this one reason for the restriction!

And the result!

Labor, especially building labor, has been enabled to force its wages up and up (and correspondingly reduce its output) until, although we are spending more for building than ever before, the results are far from correspondingly great.

Farmers, without the customary annual increase in population, find themselves with fewer mouths to feed, albeit with higher cost of production.

Exporters, with costs mounting ever upwards, discover the foreign customers' unwillingness or inability to meet the increase.

And, perhaps worst of all, we see a most unfortunate shift in our own working population. The question is, are we bettered by the movement of the southern negro to our northern cities and the influx of Mexicans to the South and West more than we would have been by a similar quota of Italians and Greeks? We can, at least, assimilate

(Continued on page 96-d)

PENCIL POINTS



Figure 3.



Figure 4.

Rubbings Made by Otto F. Cerny.
(see text on page 96a)

PENCIL POINTS

"SUBSTITUTION"

Editor, PENCIL POINTS,

Dear Sir:

Your article on "Substitution" in July issue of PENCIL POINTS is very much to the point. Manufacturers of genuine wrought iron pipe have had a long and discouraging experience with the kind of substitution of which you speak, namely the installation by the contractor of an article which is cheaper than that specified. You hit the nail on the head in saying that in this case the owner pays for the specified article, but he does not receive it, and the contractor in most, if not all, cases reaps an extra profit by the use of a lower priced article.

How to prevent such substitution has for many years baffled the efforts of both architects and pipe manufacturers. In this case it seemed unreasonable to expect an architect to examine every piece of pipe that went into a building which required anywhere from ten to fifty miles of pipe, even if his fee was large enough to permit him to keep competent inspectors on the ground all the time.

The cases of substitution discovered by us convinced us that extensive substitution was taking place, with little chance of discovery. Hundreds of cases could be cited, but the two following are particularly illuminating.

On a government housing project, a firm of testing engineers of national reputation was employed specifically to pass on all materials received or installed. The specifications called for genuine wrought iron pipe. Naturally we felt very sure, in this instance, that no substitution could take place. It so happened that one of our men visited the project while under construction, on a mission of entirely different nature, and quite accidentally discovered that only an occasional length of genuine wrought iron pipe had been installed, the greater part of it being pipe of another material selling in the open market as much as 40% below the former.

In another case, we had occasion to remodel one of our own buildings, and discovered that the contractor had brought in a considerable proportion of pipe other than our own, which quite naturally was specified. The other pipe was much cheaper. Happily, we caught the "mistake" in time, but the incident came so close home that it absolutely convinced us that no marking, except of the most conspicuous character, could ever effectively prevent mistakes and substitution of this character.

One effect of such substitution, carried on for a number of years to a larger degree than ever suspected by most architects, is that genuine wrought iron is frequently blamed for the failures of the cheaper pipe material which was substituted.

It should be mentioned that genuine wrought iron pipe of Byers manufacture for years has been plainly marked by rolling the name into the metal, at intervals of only three or four feet. This, we believe, fulfills the requirements of your suggestion of "unobtrusive but characteristic identifying marks." But it proved wholly insufficient, because it required close inspection of every length of pipe, usually after it was installed in inaccessible places. We came to the conclusion that only a form of marking which would hit the architect, owner, or inspector squarely between the eyes, would ever be satisfactory. In other words, the marking had to be so eye-arresting as to be conspicuous by its absence.

After years of experimenting with marking devices, we finally succeeded in perfecting an inexpensive method for painting a spiral stripe in red or other bright color from end to end of every length of pipe. The appearance of pipe is rarely of consequence, for it is either concealed behind walls or partitions, or when exposed in any building other than a factory, is covered with paint of some kind. There would seem to be no objection to the most conspicuous marking of any material which is to be concealed, or is ultimately to be painted or covered in some other manner. Since commencing to mark the pipe in this manner, if a length of pipe, or any quantity of pipe is installed, which does not have the spiral stripe, it will be almost automatically discovered on the most casual inspection by owner, architect or engineer.

Yours very truly,

A. M. BYERS COMPANY,

T. L. Lewis, General Sales Manager.

New York, July 23, 1925.

The article on "Substitution" appearing in your July issue is worthy of serious consideration. "Imitation is the sincerest form of flattery" and the very fact that such imitation is attempted speaks volumes for the high character of the article imitated. When we are told that a substitute is "just as good" as something else we must appreciate how very good that something must be, to be the standard for imitation.

In recent months a certain imported heavy Window Glass has appeared in this market. It is one-quarter inch in thickness and has been glazed, in some instances, as a substitute for Polished Plate Glass. This glass is misleadingly called "Demi-Plate" while, as a matter of fact, it is not Plate Glass in any manner whatsoever. The latter, as is generally known, is ground and polished, by an expensive process, after it is cast or drawn, which produces the unblemished and brilliant surface for which it is noted. This glass is obtainable in thicknesses ranging from $\frac{1}{8}$ to $1\frac{1}{2}$ inches. The former (Demi-Plate) is neither ground nor polished. It is merely heavy Window Glass and contains waves, blisters and stones, which are always more or less in evidence in the Window Glass product, but because it is made $\frac{1}{4}$ " thick, which is the thickness of Polished Plate Glass most commonly used, it has been imposed upon the innocent buyer at the same price as the genuine article while its actual value is about one-half.

The substitution of one product for another should be made solely with the buyer's knowledge and consent and after all differences in quality, appearance, etc., have been fully explained. To assume the right of substitution "unbeknownst" to the purchaser is to perpetrate a fraud.

G. OSGOOD ANDREWS,
Eastern Representative.

The Plate Glass Manufacturers of America,
First National Bank Building
Pittsburgh, Pa.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Celotex Specifications.—A.I.A. Filing Index 37a1. Document with four full page detail drawings and complete specifications covering Celotex Insulating Lumber for all uses including wall sheathing, roof insulation, plaster base, interior and exterior finish, floor deadener, floor insulation, and for application of wall paper, Sanitas or canvas. Standard filing size. The Celotex Company, Dept. 209, 345 No. Michigan Ave., Chicago.

Wrought Iron of Distinction.—Portfolio of 42 plates showing many pen and ink drawings and photographic reproductions of lighting fixtures, lanterns, candle sticks, hardware, weather vanes, fire sets, etc. The Florentine Craftsmen, 45 East 22nd St., New York City.

Hydrex Specifications.—Documents covering built up roofs, sound deadening and insulation, sheathing, damp-proofing for walls, etc. Standard filing size. Hydrex Asphalt Products Corporation, 120 Liberty St., New York City.

Slate for the Roof.—Handsome brochure with many plates in full colors. Specifications, photographs of finished jobs, etc. Standard filing size. Vendor Slate Company, Inc., Easton, Pa.

Laboratory and Vocational Furniture for Schools.—Catalog No. 21. Illustrates and describes complete line of equipment for the modern laboratory. 104 pp. $8\frac{1}{2} \times 11$. E. H. Sheldon & Co., Muskegon, Mich.

Waterproofing Specifications.—Portfolio of specifications covering waterproofing, damp-proofing and a complete line of technical paints. Standard filing size. A. C. Horn Company, Long Island City, N. Y.

The Fireproofing Handbook.—8th Edition. As its name implies this work covers a wide range of fireproofing materials, their uses and application. Specifications, detail drawings, tables, types of construction, etc. 72 pp. $8\frac{1}{2} \times 11$. The General Fireproofing Company, Youngstown, Ohio.

Published by the same firm: The Waterproofing Handbook, 6th Edition. Companion volume to the above covering all phases of waterproofing, technical paints, wood preservation, etc. 72 pp. $8\frac{1}{2} \times 11$.

Pumps for Buildings.—New Catalog No. H-301. Covers subject indicated for the information of architects, engineers and specification writers. All suitable types of pumps are described together with their capacities for all building uses. 48 pp. $8\frac{1}{2} \times 11$. Fairbanks, Morse & Co., 900 So. Wabash Ave., Chicago.

Waterproofing Specifications.—This document covers all types of waterproofing as applied to building construction, in convenient form for the specification writer. There is also a section on technical paints and enamels. 56 pp. $8\frac{1}{2} \times 11$. Toch Bros., Inc. 110 East 42nd St., New York City.

Portfolio of Mantel Designs.—Photographic reproductions of 20 mantels suitable for various uses. Post card size. Georgian Mantel Co., 15 East 40th St., New York City.

PENCIL POINTS

ANSWERS

(Continued from page 96-a)

the second generation of the latter without loss of racial pride.

And we must bear in mind too that, with the Southern, are also shut out our British, Scandinavian and other North European cousins from among whom we formerly recruited the majority of our skilled building mechanics. It is in place of these that the negro has migrated into our smaller northern cities where but few of the Latin races would be attracted.

And, in some months, the number of the laboring element leaving our shores is greater than that coming in!

All this sounds far from germane to the subject under discussion but it is essential, if one is to attempt to judge the effect of supply and demand on any particular phase of employment, that one should appreciate the far-reaching consequences of public policy pertaining thereto.

Thus is our national stand as to immigration directly responsible to a considerable degree for the advance in cost of all we buy, while it has not helped in any degree the income of the average professional man or shop keeper.

Since this be true, it is probably also true that, with a continuation of this present immigration policy, it will take at least a generation for a readjustment of the wage scales of brain and brawn workers unless, as many economists think, we are on the verge of a financial depression being brought about by the inability of the farmer, the miner and the manufacturer to find sufficient and remunerative demand for their products.

Such a condition would have an immediate effect on building construction, as has already been the case in the Northwest, and would materially lower all building costs. Where the professional man would find himself in the resultant readjustment is hard to prophesy, but it is safe to say that he will be no worse off than at present.

All of which is but to preface a constructive suggestion which the writer wishes to offer to those architects and draftsmen who, jointly, are working for the greatest good of their profession. I fear that there is little to be hoped from those architects who, in "pride of place", consider themselves in distinctly different class from their employees, using the latter only as so many cogs in the wheels of their success. It would be interesting to see one of these "heads of the profession" set about finding a remunerative job in the office of one of his competitors.

But, from those more-or-less-unselfish individuals who delight in seeing others get ahead and take real pleasure in being factors in such success, there is hope for the draftsman who is conscientious and industrious and possessed also of those other attributes which make him a desirable employee: education, training, interest, quick insight, rapid, workmanship, versatility, dependability and, last (but by no means least), loyalty.

If you, as a draftsman, have not all of these, it is quite needless for you to look further for the cause of your lack of progress. Possessing each of them to a fair degree, you are probably doing well "as is", even though you may be justified in wanting to do much better. Should the foreman of a fair-sized drafting-room be satisfied with \$100.00 a week, or a capable superintendent with \$80.00 per, when one of the plasterers on the job, by means of a little overtime, can draw \$137.50? Perhaps, but I, for one, don't blame him if he isn't.

If you are the kind of a draftsman who, without much native ability, took any one of the many short-cuts in education in order to save the arduous acquisition of the fundamentals, there is not much to be said for you except that you had best go back somewhere and complete your education before continuing your complaint.

In any event, don't be guilty of that most despicable of job-getting methods, under-bidding the other fellow. How diminutive must be the self-esteem of that employee in the knowledge of having stolen his situation from someone else as good or better, simply by the process of accepting a smaller salary!

On the other hand, how contemptible is that selfishness which induces professional employers (supposedly ethical) to agree not to tempt men from each other by the offer of higher wages! It is one of the few legitimate excuses for workers' unions. There should be nothing to interfere with a man's privilege of securing the most for his services that the market will bring. Corollary: Every man should prove himself a candidate for a higher salary by

striving to deliver to his employer a greater value than is being paid him.

Now, let us assume in an average office, a majority of employees who wish to better themselves and the office output, also to fortify themselves to some extent against that inevitable day when either the payroll must be trimmed or the office cease to function.

Such organization is at present working thirty-eight to forty hours a week, with all holidays off, also a two-weeks' annual vacation for all employees of a year's standing or longer. And, by the way, these holidays and vacations would prove a terrific drain on the overhead of any concern whose salary schedule were not so adjusted as to have the salaries absorb the resultant deductions. That is likewise inevitable. Again, "you can't eat your cake and have it too".

Let a majority of these employees with their employers get together on a platform of greater efficiency, increased flexibility and improved office loyalty. These betterments can be brought about by various means.

First, let us change the pay to an hourly basis by averaging it upon the actual number of hours in the year against the year's pay in order that both employer and employee may quit "kidding themselves" as to who pays for lost time.

Then, in normal times, change the working day to begin at eight in the morning, allowing its afternoon duration to vary with the amount of work on hand, but eliminating evening overtime, if possible. In the summer, if work on hand permits, cut out all Saturdays before reducing the number of hours on other days. By working eight hours a day, each man would still put in as many hours a week as the present schedule, be remunerated accordingly and yet have Saturdays free.

If work piled up, the afternoons could be extended an hour and, if that did not suffice, Saturdays be used also. This flexibility would reduce the number of transients in an office and increase its efficiency, not only by cutting down the "turnover" but by increasing the percentage of application of the individual. We all know that the idea that a real man can't do his best during nine hours a day for six days a week is "poppy-cock". He can, if he cares to, unless his work is drudgery or the remuneration unattractive.

Then, in order that congestion in the work of the office be not invited, let us shun all unpaid competitions and preliminaries, also all other competitions at times when work is plentiful or when the particular office has been found to lose more than fifty per cent of such efforts.

Further, let the office give special consideration to those of its employees who can bring in new business, awarding to all such a percentage of the gross receipts from same; perhaps let the second of such commissions win a name on the drawings and a place on the front door. This should cut to a minimum the temptation of employees to eke out their stipends by working for others in their spare time and should correspondingly increase their sense of loyalty to their employers.

Finally, there are two pleasing alternatives in lieu of paid holidays and vacations. One is the regular payment to older employees of annual bonuses, based upon the year's profits, and to be paid as earned increments, not a present. The other is the creation of a sick-leave and vacation fund to which each employee contributes a small amount of his weekly salary and from which he can draw half-pay while on vacation or absent on account of sickness.

I doubt if there is anything new in any of the foregoing but it is possible that the presentation at this time, in view of the discussion that has been carried on, may be of use to someone who is looking for a way-out and will appreciate such suggestions in concrete form. I trust that some of these will find means of bettering their conditions.

For those of another and younger class who choose to accept small salaries for the "privilege" of working in certain offices on account of the prestige to be thus obtained, let it be said that such "prestige" is an absolute myth and they had far better take a higher salary in a less-known organization where they can progress more rapidly and be in closer touch with their employers meanwhile. The next employer cares little for whom such a one has worked, provided only that he has real ability.

But, for that other class of youngsters in the game who are simply looking for an easy way of making a comfortable living, my advice is to get out of architecture and become a walking-delegate or boot-legger or something else equally honest and remunerative.

PARTICIPES CRIMINIS.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

HAVING failed most dismally in our cunning scheme to get somebody else to do the heavy work in carrying on this department, we have decided to put the whole proposition on a paying basis. We don't see how it can be made to pay Ye Editor as he doesn't get a cent extra for doing this job, and we don't see how it can be made to pay the magazine; so the only thing left, as we analyze the situation, is to make it pay the contributors and the readers.

So here's what we're going to do. We are going to offer prizes according to the following specifications. There will be four monthly prizes of ten dollars each, to be awarded as follows:

Prize No. 1 for the most interesting sketch received each month. No conditions as to subject or medium used. Sketches may be of any size and done in any manner pleasing to the sketcher.

Prize No. 2 will be awarded to the most interesting verse. It may be a couplet, or a triolet; a limerick, an ode, or a dithyramb; it may be blank verse or free verse, or doggerel or anything whatever that has capitals at the beginning of each line. It may deal with architecture or astronomy or anything else.

Prize No. 3 will be awarded to the best cartoon or caricature. No conditions as to subject or treatment. In awarding this prize greater weight will be given to the originality and cleverness of the idea, rather than to the technique or draftsmanship.

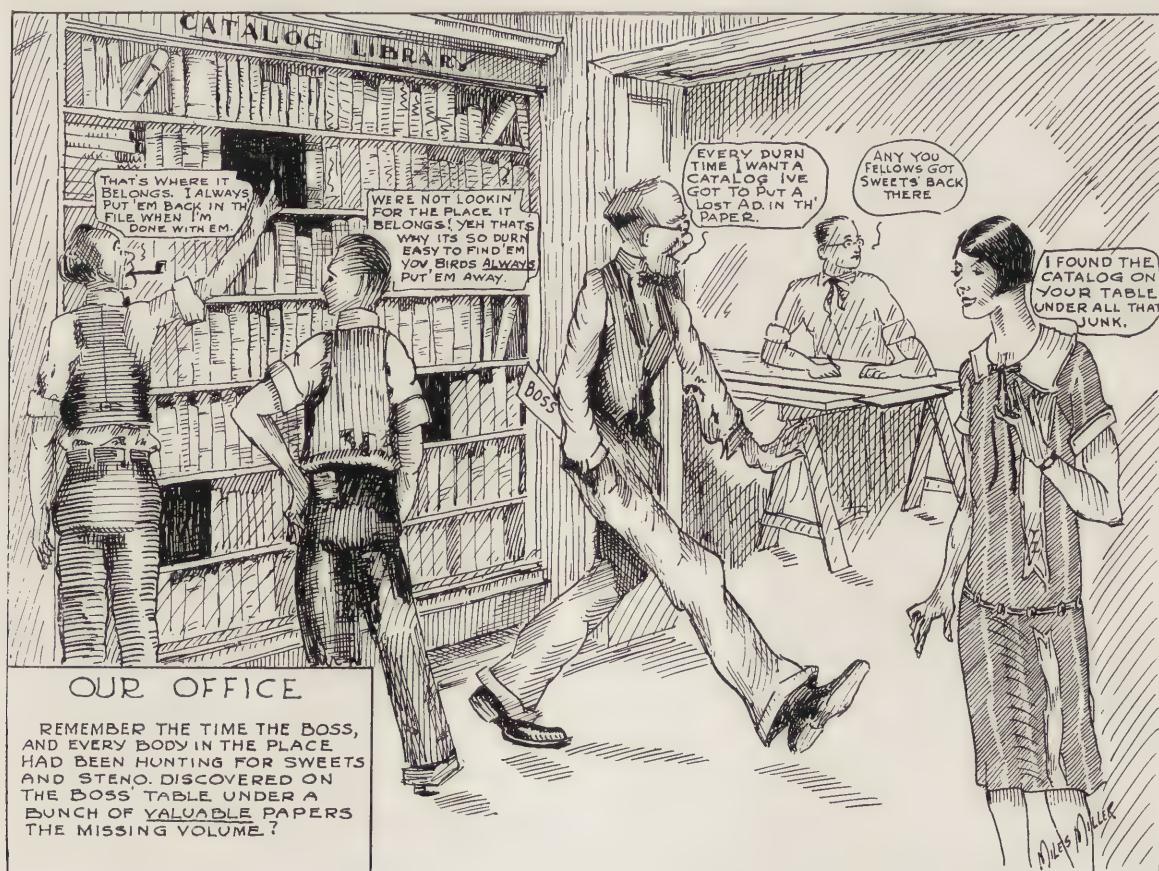
Prize No. 4 will be awarded to the most interesting item received each month not falling within any of the above mentioned classifications. It may be an anecdote or a witticism, or anything else which would find proper place in this column, and we are to be the sole judge of what is proper.

This stupendous contest starts with the month running from September the fifteenth to October the fifteenth. All contributions received between these dates will be considered for the prizes, whether they are actually selected for publication in the November issue or held for later use. The same dates will be observed for subsequent judgments; that is, the second series of prizes will be awarded for contributions received between November fifteenth and December fifteenth, and so on until further notice.

All drawings, whether awarded prizes or not, will be promptly returned to the contestants.

Anyone may enter as many items as he wishes for one or more months, whether he be a subscriber for PENCIL POINTS or not; and contributions from foreign countries are quite as welcome as the domestic product.

Mark all contributions with the name of this department and make sure that in all cases the name of the contributor appears both on the wrapper and inside the package.



"Our Office," by Miles Miller, Dayton, Ohio.

PENCIL POINTS

And here's a little contribution from our old friend, Oong Gow:—

ARCHITECT'S LULLABY.
AFTER THE BOOK OF DIVERSION.
PEOPLE WHO PUT YOU TO SLEEP.

(As if anybody cared).

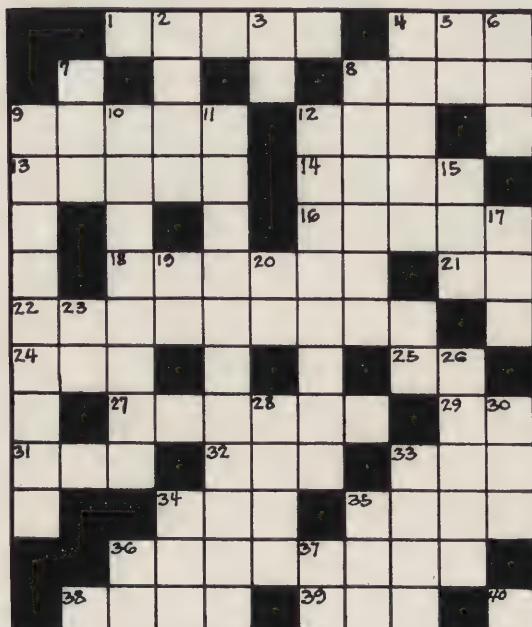
If, at night, you fail to slumber,
Count your "prospects" without number.
If you still continue wakeful,
Count the "stops" to make a lakeful.
Then, if your mind at random ranges,
Count the gooks who speak of changes.
And, if slumbers still repel you,
Count those who *change* but never tell you.

OONG GOW.

Messrs. Lord and Taylor, Centennial Contest Department, Fifth Ave., New York, are offering prizes aggregating \$3,000.00 for designs for a symbol. The first prize is \$1,000.00. The competition closes October 15th, 1925. Comprehensive circular giving specifications and full details may be secured free on request.

And George H. Lathrop, of Rochester, N. Y., who is an electrical contractor, says, "Why does the architect locate on his drawings three switches where there isn't space for one. And why do they insist upon changing the base and trim of a door after the wiring and plastering has been completed?" And he further suggests that on all wiring plans and details of base and trim, all medicine cabinet sizes, etc., be included. We pass this on for what it is worth.

THE office of Messrs. Smith, Hinchman & Grylls, of Detroit, held a grand blow-out and party a little while ago, at which we are assured a good time was had by all. As one of the sporting events connected with the occasion an entirely original cross word puzzle was a feature. Here's the puzzle and on page 89 will be found the solution thereof. Lack of space only prevents us from reproducing other interesting documents which were produced by the office force to mark the event.



Original Cross Word Puzzle sent to us from the office of Smith, Hinchman & Grylls, Detroit, Mich.

HORIZONTAL

1. Has four legs and smooth top.
4. Result of old age.
8. In great demand on the 15th and received on the 18th.
9. Common to cigars and goats.
12. Yowls on the back fence or keeps company with Dick and Harry.
13. Found around doors and windows.
14. Broke out by the snow.
16. Stones used at the corners of buildings.
18. A member of the clean-up squad.
21. Part wet and part dry (abbrev.)
22. In between.
24. V. S. architects (Abbrev.)
25. Nickname of a jolly architect.
27. What we all wish our pay checks were.
29. Abbrev. for Hawkeye State.
31. Raw stuff.
32. First word of song that made bananas popular—means the same as "this is so sudden."
33. The first half of %.
34. Condition of draftsmen on a nice day.
35. Often yellow when found on blue-prints.
36. They move in columns and were popular in 1918.
38. Used by draftsmen and pigs.
39. Disappears under rubber.

VERTICAL

2. Against everything, especially work.
3. Abbrev. for Southern State—not Mo.
4. The climbing sheik of yesterday.
5. Yiddish exclamation.
6. High explosive recommended for getting immediate action.
7. Goes with bolts—and is buried for winter use.
8. A means of support.
9. He never has to get his own breakfast.
10. Found in divorce courts and drafting rooms.
11. Beginning and end.
12. Should be true but generally bows.
15. Loud, noise—the office at 8:15 A. M.
17. Found on rugs and taken on the quiet.
19. Secretary of S. H. & G. (Initials).
20. Reward of merit (Abbrev.)
23. Two-thirds of a roadhouse.
26. Rows and rows.
28. Money in Germany.
30. The first houseboat.
33. The bums' hotel.
34. No cross-word puzzle is complete without this.
35. Two legged animals.
36. 135° east of north.
37. Once over.
40. Well, well.

D. W. May, 3918 Fairfield Ave., Fort Wayne, Indiana, has duplicates of the following issues of PENCIL POINTS which he offers for sale: September and October, 1922; January, February, March, April, May, June, July and August, 1923.

Luis Canedo Gerard, Apartado No. 4 Bis, Mexico City, Mexico, requires copies of PENCIL POINTS for November, 1924, and March, 1925, to complete his files.

A. C. Neville, 137 Marlboro St., Wollaston, Mass., has a complete file of PENCIL POINTS copies from the first issue to and including the August, 1925 number, which he will sell.

Fred J. Woodward, Architect, 1423 Harvard St., Washington, D. C., has thirty-five numbers of the series of White Pine Monographs which he offers for sale at 25¢ each.

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Pencil Sketch by W. L. Swinnerton, Liverpool, England.



Pencil Sketch by W. K. Aykroyd, Toronto

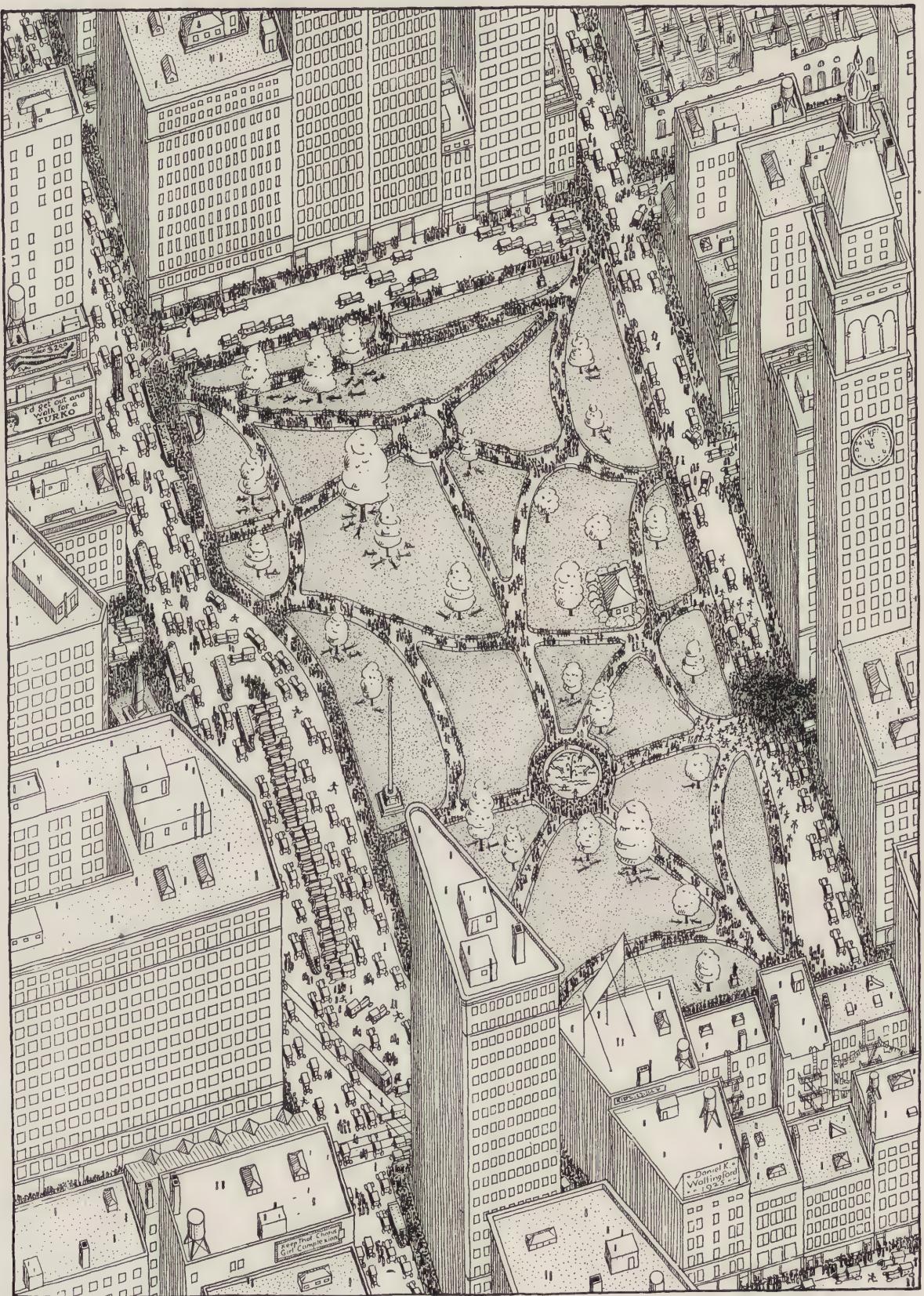


Pencil Sketch by Albert Gracser,
New York



Sketch by John J. Klaber, Notre Dame du Marthuret,
Riom, France

PENCIL POINTS



Picture made by our staff photographer showing Madison Square on a midsummer's day, with "everybody" out of town. Crowd at right of picture shows group of exasperated architects and draftsmen trying to get into our office to subscribe for Pencil Points.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART XI.

CONCRETE WORK—Continued.

THE specifications for a Consolidated District School, upon which we are engaged, were carried, in Part X in the August issue, part way into Division C, Concrete Work. It will be noted that, in these specifications, certain waterproofing and dampproofing are included. A word here on this subject will not be out of place.

Whether or not the dampproofing of a basement or the waterproofing of its walls are needed must always be subject of special consideration, as must likewise be the question of the amount or completeness of either. In a few soils one can, in building basements of moderate depth, be assured of their continual dryness without any special precautions to keep them so.

At the time of securing his preliminary data on the site of any building, the architect should always, when ascertaining in a general way the probable bearing capacity of the subsoil, find out also how much moisture it carries during the various seasons. If possible, he should learn too whether or not such moisture, at the level of his future basement, is likely to have pressure back of it.

A soil quite capable of carrying a load of from 3,000 to 5,000 pounds per square foot may be either wet or dry or both, intermittently. If hardpan be well down below the depth intended to go and the subsoil be yellow-clay or contains much sand or gravel, it is probable that rain-water percolates straight down, without lateral pressure. But, if there be blue-clay, gumbo or other impervious layers, one may encounter considerable pressure behind the soil moisture, may even find springs. On this account, an architect should supplement his observations at the site by finding out what the local experts have to say about it.

Of course, if the job is of much size, he will have borings made and test-holes dug and derive some information thus, but, while these will afford knowledge of use in designing footings, they will tell him less about conditions of moisture, because the latter vary to such an extent throughout the year.

Having, however, reached a conclusion that a certain degree of waterproofing must be provided, one can still wait until the excavating is under way before determining how much. Real waterproofing is expensive and should not be specified in any offhand manner. The following are various methods in common use, any one or all of which can be followed, dependent upon what appears to be expedient.

(A) INTEGRAL WATERPROOFING. Our specification (Par. C of Art. 2, Div. C) calls for all walls below grade to be rendered "impervious" by an admixture of 8% of hydrated lime or other approved integral waterproofing. The reason for incorporating this in all walls, instead of only in outside walls, is that if water lies in the ground around a building in certain seasons of the year in any considerable quantity, it has a tendency to find its way, through the action of capillarity, up through the footings of interior walls as well as exterior, frequently causing serious damage to plaster and decorating in basements and, sometimes, on up into the story above.

(B) PARGING. Outside walls can be painted with hot pitch or asphalt or any of several waterproof paints on the market. The important features in their application are that they be applied to clean surfaces and that every portion of all surfaces is covered. To this end, specifications should state that the work shall be in two coats or that it shall be gone over a second time and all scant spots retouched. The footings should be left uncovered so that the coating can be carried well down on same. This work should also be carried up to under-side of base-course, be same stone, terra cotta, concrete or brick. But here is the weak point in this waterproofing: it cannot be carried up on the face of the base-course as far as the sod is liable to lie, hence surface water will have a tendency to find its way through the joint under base-course. If the paint can be carried through the joints under and behind the base-course, well and good.

(C) DAMP-COURSE. It appears sufficient, at times, to merely guard against the "suction" of moisture through

foundation walls up into those above by introducing a damp-course of one or two thicknesses of tarred felt or composition roofing material. This should extend unbroken through the wall and project about 2" beyond both faces, and should be well lapped at all joinings.

(D) MEMBRANE WATERPROOFING. To guard against water under pressure, either in walls or floors, nothing can be quite as effective as properly designed membrane waterproofing built into the walls in layers between coatings of tar-pitch or asphalt of proper consistency. This should be absolutely continuous throughout all surfaces, with all corners rounded and reinforced with specially prepared fabric. Our discussion is not a treatise on this subject, hence further detail will be left to the many excellent texts available.

(E) SUB-SURFACE DRAINAGE. Paragraphs A and B of Article 6, Division B, provide for the inspection of the area around foundation walls before backfilling is done. This gives opportunity for the architect to determine the need of protecting against water from rain-fall by the installation of open-joint farm drain-tile laid, with slight incline, along outside of footings and extending to a sump or sumps from which water can be conducted or pumped into an open drain or a storm water sewer, if available. Judiciously schemed, such a layout can be made to take the place of a system of membrane waterproofing—and at a fraction of the cost of the latter.

(F) APPLIED WATERPROOFING. Fortunately, as a last resort, if it be found that more efficacious waterproofing is needed than one's economical program has provided, recourse can be had to the form of waterproofing sometimes known as "internal". This is effected by discovering the courses of all seepages, cutting them out, directing the flows into tubes, plugging the tubes and then coating the walls with special waterproof plaster. This too is fit subject for more elaborate treatise.

We will suppose that the subject of waterproofing as relates to our consolidated district school building is of sufficiently known quantity to warrant incorporating these schemes into our specifications: (1) an integral mix of 8% of lime in the walls, (2) parging on the outside and (3) the insertion of a damp-course in all basement walls. Then, if these precautions don't serve, we will assume that a thorough investigation should be made before deciding upon something more positive—and more expensive.

Proceeding then from where we left off at the close of Part X, on the subject of Materials of Concrete, Division C: ART. 6. DAMPPROOFING.

(A) DELIVERY of all dampproofing materials shall be in unbroken original packages bearing the maker's labels.

(B) FOR WATERPROOFING. Tar-pitch shall be best, straight-run, coal-tar-pitch of specific gravity not less than 1.23 at 60° F, melting point not less than 130° F, nor more than 140° F, and evaporation not greater than 8½% after 7 hours heating at 275° F. Asphalt equivalent to the foregoing or proprietary material of equal merit may be substituted for the tar-pitch if first approved by the Architect.

(C) TARRED FELT shall be approved tar-saturated felt weighing not less than 14 lbs. per 100 sq. ft. For dampproofing, approved ½-ply ready roofing may be substituted for the tarred felt.

WORKMANSHIP

ART. 7. PROPORTIONING, MIXING AND PLACING.

(A) INSPECTION. No concrete mixing may be started without due notice to the Superintendent and opportunity given him to inspect the work from its beginning and to observe the surfaces to be covered. Such surfaces shall be clean and free from rubbish, washed, scraped and grouted, if so directed by the Superintendent.

(B) PROPORTIONS OF MIX of concrete shall be 1:2½:5 for base floors laid on cinders and for other mass concrete. For other work, including all concrete containing reinforcement, the proportion shall be as indicated on drawings or, if not so given, shall be 1:2:4. In order to secure a mixture of the greatest density, the Architect may order necessary changes in proportion of the aggregates, the percentage of cement to sand remaining as originally prescribed.

(C) MEASURING. A systematic method shall be em-

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ployed to insure the correct mixture of each batch. Measuring by shovel is prohibited. Measurement of coarse and fine aggregate and cement shall be by loose volume of which the unit shall be a bag of cement weighing 94 lbs. net and assumed to be equivalent of one cu. ft.

(D) PROTECTION. Concrete poured in warm weather shall be kept thoroughly wet after initial set and for at least 48 hours after pouring. For all concreting carried on during freezing weather, such special precautions shall be taken as will obviate all danger of injury by frost. Only boiling water and heated aggregates shall be used. Frost shall be drawn from all surfaces with which fresh-laid concrete is to come in contact, by blowing with live steam or drenching with boiling water, or both. An adequate enclosure heated by continually-fired salamanders shall be maintained for the protection of such work after pouring and same shall also be covered, while fresh, with straw and tarpaulins. No concrete may be poured, except by special permission, on days when the temperature at 9 a. m. is less than 25° above zero, F.

(E) MIXING. All concrete shall be mixed in rotating batch-mixers, except that, under special conditions, the Superintendent may permit small batches to be mixed by hand. Under either method, the materials shall first be thoroughly mixed dry, then the proper amount of water added as indicated by the slump-test. A competent Foreman shall be in constant attendance at each mixer to see to the correct proportioning and mixing of every batch produced. Mixing drums shall operate at a uniform speed of 200 ft. per minute and for a minimum of 1½ minutes after water has been added, except that mixers of 2 or more cu. yards capacity shall be operated for a minimum of 2 minutes after water has been added. Machine and hoppers shall be thoroughly cleaned before being allowed to stand idle. If tower is used for distributing, the spouting shall be at proper incline to insure continuous and even flow of both aggregates and liquid.

(F) SLUMP-TEST. The Contractor shall provide a conical form of No. 20 gauge galvanized iron for making slump-tests; also a $\frac{5}{8}$ " pointed metal rod 21" long. The form shall be 4" in diameter at top, 8" at bottom and 12" high. Tests shall be made by the Contractor once or twice daily as directed by the Superintendent. Percentage of water in concrete shall not be in excess of that to produce the following maximum slumps:

For mass concrete	2"
For concrete columns	6"
For reinforced slabs	8"
For base of floors and walks on earth	4"
For finishing coat	2"

(G) PLACING. Concrete shall be conveyed to points of delivery in watertight carriers and deposited as nearly as possible in final position immediately after mixing and within 30 minutes after water has been added to the cement and sand. Re-tempering or unnecessary re-working of concrete will not be permitted and any concrete placed or moved after the 30 minutes will be rejected and shall be removed from the premises. Pouring shall be continuous from working-joint to working-joint. Over-time labor shall be provided for this purpose without charge when such continuity cannot be otherwise secured.

(H) JOINTING. The position of working-joints shall be as approved by the Superintendent and shall be rigidly adhered to. In plain or mass concrete, working-joints shall be left rough and, before placing new concrete, all surfaces which have set shall have all soft or loose material removed and be brushed clean, drenched and covered with a $\frac{1}{16}$ " layer of neat Portland cement. Where piers or walls are 16" or more in thickness, wood blocks 4" x 4" x 18" shall be bedded in the concrete every 4' 0" when leaving off pouring. Blocks shall be laid along center line of surface for removal before pouring additional concrete, thus forming dowels. Each pier shall have at least one such dowel, reduced in length, if necessary, so as not to be closer than 8" to any face of pier.

(I) COLUMNS shall be poured continuously from their bottoms to underside of girders or column-heads, but no faster than will permit careful rodding of each portion deposited.

(J) BEAMS AND SLABS over columns shall be poured about 30 minutes after tops of columns supporting same. Slabs shall be poured continuously with beams and girders underneath.

ART. 8. CONCRETE SLABS.

(A) CLASSIFICATION of concrete floors shall be as follows:

- (1) TYPE A, Concrete floors forming base slabs under terrazzo, vitreous tile and marble.
- (2) TYPE B: Interior concrete floors with cement mortar finish.
- (3) TYPE C: Exterior walks, platforms and steps.
- (4) TYPE D: Roof slabs.

(B) TYPE A FLOORS shall be floated and left at proper level to receive bedding or fill, 3" below finished surface for terrazzo and 1¼" for marble and vitreous tile.

(C) TYPE B AND C FLOORS, WALKS, PLATFORMS AND STEPS. For interior work, topping shall be $\frac{1}{2}$ " thick, of 1:2 Portland cement and sand mortar; for exterior walks, 1" thick of the same; for outside steps and platforms, 1" of 1:1:1 mortar of cement, sand and No. 4 granite screenings, free from dust. Surfacing shall follow immediately after the laying of structural or base slab and shall be worked with a wood float, then steel-troweled before initial set of the cement. Surface shall be lined into blocks, when so directed, and proper provision made for expansion. Use of dry cement for absorbing surface water will not be permitted. Unless otherwise specified, all base slabs laid on cinders over earth shall be 4" thick, except in storerooms, closets and air-ducts, where thickness shall be 3".

(D) ROOF SLABS, TYPE D, shall be constructed as specified for type B, except that topping shall be a $\frac{1}{4}$ " leveling coat. Roof slab of coal room shall have a 1" topping as specified for type C.

(E) CINDER FILL shall be laid under all type B and C work resting on earth, unless the subsoil is found to be a good quality of sand or gravel which, in the opinion of the Architect, is a fit substitute for the cinders. The earth shall first be tamped hard at proper planes and cleaned of all rubbish before cinders are deposited. Cinders shall be 6" deep and properly tamped just before concrete is laid.

(F) CINDER CONCRETE shall be filled in between all wood sleepers under wood floors, where called for. It shall be 1:2:6 mix and shall be struck off level $\frac{1}{4}$ " below top of wood sleepers. Inclines and watersheds of cinder concrete shall be built on roof slab where called for or where necessary to prevent accumulation of moisture.

(G) CONCRETE BASE shall be built in connection with all type B floors, unless otherwise stated. Base shall be 5" high and full thickness of plaster and flush with same in store rooms and closets. Elsewhere it shall project to finish, flush with screed placed by Plasterer. All base shall be laid over an 8" strip of approved metal lath bent into angles and secured to walls and floor. Exposed upper corners and returns at doors shall be rounded to a $\frac{1}{8}$ " radius. Angles at floor shall finish with cove of $\frac{3}{4}$ " radius.

(H) CONCRETE STAIRS, steps, strings, haunches, pedestals, benches for lockers and cases and foundations for equipment shall be built as detailed, in proper forms, all of 1:2:4 mix, with finish as specified for type B floors. Cores of benches for lockers and cases shall be sections of best-quality burned-clay wall tile. Equipment foundations shall have all anchors built in, as furnished by Parties providing equipment and machinery and in accordance with their directions and templates.

(I) IN GENERAL, all floors shall be perfectly level or shall incline to drains or planes of ramps, as indicated. All exposed corners shall be true and sharp or evenly rounded as required. Soon after initial set, all exposed work shall be thoroughly drenched and kept wet for 24 hours (48 hours in hot weather) and carefully protected until hard.

ART. 9. PLACING REINFORCEMENT, ETC.

(A) REINFORCING MATERIAL, either straight or accurately bent in conformity with approved drawings, shall be correctly placed (on chairs, if required), rigidly wired together at all intersections and carefully maintained in exact position and clearance, both horizontally and vertically. A competent mechanic (more, if necessary) shall be exclusively and continuously employed, before and during pouring, in the correcting and replacing of reinforcement and other members to be embedded, which may have become displaced, and shall keep just ahead of the pouring. Temperature bars shall be provided in all reinforced work and, where not specifically shown, shall be $\frac{1}{4}$ " round, 12" o. c., placed at right angles to main reinforcement and wired to cross-

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members of same size, 2' 0" o. c. Reinforcing bars, where spliced, shall lap a distance equal to 60 diameters of the bars.

(B) BUILT-IN MEMBERS. All nosings, guards, curb-angles, anchors, cast iron door and hole frames and similar members, delivered by others to the Contractor under this Division, shall be placed in forms by him under direction of the Superintendent or as shown by drawings. Included in this are the anchors or clips for floor and roof-sheathing strips. These shall be 12" and 16" o. c., respectively, one way, by 3' 0" in opposite direction, as ordered. Sleeves or other forms, required for all mechanical trades, will be provided and placed by Contractors under those Divisions. This Contractor shall afford all cooperation in connection with same and shall use all necessary protection for such members until embedded. Just before pouring, all sleeves shall be filled with sand or other material, to keep out concrete. After concrete is set, all wood boxes inserted for pipe openings shall be removed and, after all piping and conduit is in place, the holes around same shall be filled, pointed and finished with cement mortar. Clips for furring rods in under side of second and third floor beams, and furring hangers from roof beams will be provided and set under Division L and the Plasterer shall be given 48 hours notice when the forms are ready for same.

ART. 10. FORMS.

(A) IN GENERAL. The Contractor shall provide all required wood or other forms needed for the proper execution of all concrete work, plain and reinforced, and supplied in sufficient quantity so that the work can be prosecuted with despatch. Removable steel forms of No. 16 gauge metal, of approved design, may be used in place of wood for floor and roof slabs, at option of Contractor.

(B) STRENGTH of all forms shall be sufficient to carry the dead load of materials and construction operations without deflection or vibration. They shall be so braced as to be rigid under trucking and other action incidental to building. They shall be so designed as to be capable of needed adjustments, shall be carefully watched as work proceeds and all faults promptly corrected.

(C) SMOOTHNESS. Surfaces of forms in contact with concrete shall be of dressed lumber with tight joints, so built as to furnish, after removal, a true, smooth-finished concrete. Members and surfaces shall be straight and true to line; walls, columns and piers absolutely perpendicular; and all horizontal members free from slightest sag. Perfect finish will not be required of those surfaces exposed in basement or in ducts or those elsewhere which are to be concealed by subsequent construction. All such surfaces shall, however, be true to planes and profiles detailed.

(D) INSPECTION. Ample opportunity shall be given the Superintendent to examine all forms just before concrete is poured. They shall then be thoroughly clean, free from shavings, dirt or other rubbish, and shall be thoroughly drenched. Forms for vertical construction shall have openings at bottom, until ready for pouring, to permit removal of rubbish and dirt.

(E) WRECKING OF FORMS shall not be started for 7 days after pouring concrete and none shall be done until the Superintendent gives consent and then only at sole risk of Contractor. After wrecking, sufficient struts shall remain to insure rigidity until final set.

ART. 11. TESTING.

(A) TWO TESTS of reinforced floor construction shall be made by the Contractor at his expense under direction of the Architect. Tests must show that the construction will sustain a load equal to twice the sum of live and dead loads, without failure or excessive deflection. The construction may be considered part of test load. Each test load shall cover an area equal to length of span by 10' 0" wide and shall remain in place 24 hours. Total deflection under full test load at expiration of 24 hours shall not exceed 1/800 of the span.

(B) ADDITIONAL TESTS shall also be made by the Contractor at his expense in same manner as above, each time that a test shows failure of a slab to meet the requirements.

(C) REPLACEMENT. Whenever a test develops defects in a slab, such slab shall be completely removed and replaced with proper material, correctly installed and capable of meeting test requirements. All such removal and replacement and subsequent testing shall be at the expense of the Contractor.

ART. 12. WATERPROOFING.

(A) INTEGRAL. As specified in Par. C. of Art. 2, all footings and basement concrete, except that in columns, shall be rendered waterproof by the admixture of 8% of hydrated lime or other material for the purpose, approved by the Architect.

(B) ON EXTERIOR WALLS. Wherever finished outside grade is above floor of basement, the outside surfaces of exterior walls and walls of pits and area-ways shall be painted with a heavy coat of waterproofing as specified in Par. B. of Art. 6. Walls shall first be thoroughly cleaned and all loose particles removed. Painting shall extend to footings and up to finished grade and thoroughly cover all surfaces. After it is dry, all surfaces shall be carefully gone over and all thin, broken or otherwise imperfect coverings shall be liberally re-touched. No waterproofing shall be covered by fill until inspected and approved by the Superintendent.

(C) DAMP COURSES. Tops of all foundation walls shall be protected by a layer of damp-proofing as specified in Par. C of Art. 6, 4" wider than wall below. In outside walls, this course shall be laid at grade line so as to form continuous damp-proofness in connection with waterproof painting. Under inside walls, it shall be laid at level of basement floor. The Superintendent shall be permitted to inspect all damp courses. Before walls are started thereon, all corrections shall be made, if any are ordered by him.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Kewanee Boilers.—Large catalog No. 80 covers boilers, garbage burners, hot water heaters, storage and pressure tanks and cast iron radiators. Standard filing size, arranged for architects, specification writers and engineers. Kewanee Boiler Co., Kewanee, Ill.

Rolling and Folding Doors and Shutters.—Catalog No. 51. Complete catalog profusely illustrated, covering all types of equipment for various uses. 136 pp. 8 x 11. The Kinnear Mfg. Co., Columbus, Ohio.

Lally Columns vs. Rolled-Steel H-COLUMNS.—Booklet discussing best type of column for a large variety of uses, illustrated with drawings, diagrams and facts. 16 pp. Lally Column Co. of Chicago, 4001 Wentworth Ave., Chicago, Ill.

Water Mixing Valves.—Illustrated handbook showing thermostatic water mixing valves for showers and a variety of other uses. Diagrams and complete specification data. 32 pp. 7½ x 10½. Leonard Rooke Co., Providence, R. I.

Lithoprints, What They Are, How They Are Made, How They Are Used and What They Cost.—Loose-leaf portfolio with samples. Useful in every drafting room. Standard filing size. Lithoprint Co. of New York, 41 Warren St., New York City.

Saving Home Construction Costs.—Technical booklet on this important subject. Long-Bell Lumber Co., R. A. Long Bldg., Kansas City, Mo.

Greenhouse Studies.—Series of renderings by Vahan Hagopian which includes plans, elevations, sections and structural features of all types of glass enclosures, solar bathing rooms, glass enclosed swimming pools, aviaries and children's glassed-over play houses, as well as green houses of various types. A suitable binder will be furnished with first mailing. Lord & Burnham Co., 30 East 42nd St., New York City.

The Roof Beautiful.—Brochure illustrated in color on the subject of roof treatment. 8 x 11. 32 pp. Ludowici-Celadon Co., Monroe Bldg., Chicago, Ill.

Historic Mahogany.—Brochure showing many beautiful designs of pieces of furniture done in Mahogany, Chippendale, Hepplewhite, Sheraton and in the Mahogany of Colonial Days in America are shown. Mahogany Association, 1132 Broadway, New York City.

Color Harmony in Floors.—Brochure illustrating in color, reproducing samples of various woods so as to show grain, color and texture. 24 pp. Maple Flooring Mfrs. Assn., Exchange Bldg., Chicago, Ill.

Flooring Specifications.—Documents covering T-M-B flooring suitable for use in a wide variety of buildings. 4 pp. 8½ x 11. Thomas Moulding Brick Co., 133 W. Washington St., Chicago, Ill.

Ball Bearing Door Hangers and Special Hardware.—Catalog No. 24. This handbook illustrates and describes hardware for all types of sliding and folding doors, overhead carrying devices, expansion bolts, ball bearing wheels, rolling ladders, etc. Fully illustrated, specification data, tables of sizes, fully indexed. 50 pp. 8½ x 11. McCabe Hanger Mfg. Co., 426 West 25th St., New York City.

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The Story of Shearduct.—Brochure illustrated with full page pencil drawings of buildings by prominent architects in which Shearduct has been used. Specifications and 6 pages of sectional drawings. Tables of dimensions, etc. 40 pp. 8½ x 11. National Metal Moulding Co., Pittsburgh, Pa.

National Steel Fabric.—Illustrated book for the information of architects, draftsmen and builders. Covers various types of stucco work with working drawings and much useful information. 32 pp. 8½ x 11. National Steel Fabric Co., Union Arcade, Pittsburgh, Pa.

Terra Cotta Specifications.—Document covering the manufacture, furnishing and setting of terra cotta. Prepared in consultation with the Structural Service Committee of the A. I. A. and the Bureau of Standards. Standard filing size. National Terra Cotta Society, 19 West 44th Street, New York City.

Store Fronts in Architectural Terra Cotta.—Illustrated portfolio with many sectional drawings and construction details of great value to architects and draftsmen. 44 pp. 8½ x 11. New Jersey Terra Cotta Co., Singer Bldg., New York City.

Elevator Door Efficiency.—Illustrated catalog showing various types of elevator doors, detail drawings, specifications, safety appliances, etc. 8 x 10¾. The Peelle Co., Stewart Ave. & Harrison Place, Brooklyn, N. Y.

Glass Lined Laundry Chutes.—Booklet completely illustrating and describing this type of equipment for the hospital, hotel, club house and fine residence. Drawings and other data. 14 pp. The Pfaudler Company, Rochester, New York.

Furnishings, Equipment and Supplies for Public Service, Catalog E-26.—All types of supplies required in the hotel, club house, restaurant, etc. 318 pp. 8½ x 11. Albert Pick & Co., 208 West Randolph St., Chicago, Ill.

The Age of Plate Glass.—Attractive booklet on the manufacture of modern plate glass. Interesting illustrations and sketches for unusual uses for this material. Plate Glass Mfrs. Assn., 1st National Bank Bldg., Pittsburgh, Pa.

Difficult Additions in One-Fourth the Time.—Folder showing the Quixsum, a device for the addition of linear feet and inches and common fractions. Shows method of operation, sample problems, etc. Especially designed for architects, engineers and draftsmen. Precision Adding Machine Co., Gotham Bank Bldg., New York City.

Raymond Concrete Piles.—Handbook on the subject with illustrations, detail drawings and much useful data. 60 pp. 8½ x 11. Raymond Concrete Pile Co., 90 West St., New York City.

What Color for the Roof?—New Brochure illustrated with color plates showing Multicrome roofs with nine full page color plates showing attractive designs of small houses of varying types. A copy of the Richardson harmonizer is included as a guide in the selection of the best combination of house and roof colors. Richardson Co., Lockland, Cincinnati, Ohio.

Book of Hardware Designs.—Profusely illustrated brochure covering plain and artistic hardware. 75 pp. 5½ x 9½. Sargent & Co., New Haven, Conn.

Soss Invisible Hinges.—Booklet showing details, and specification data. Hinges for furniture, cabinets and general use in buildings. 24 pp. Soss Mfg. Co., Grand Ave. & Bergen St., Brooklyn, N. Y.

T. & B. Registers and Grilles.—78 Annual Catalog showing complete line with attractive drawings and engravings together with prices, dimensions, detail drawings and complete data. 76 pp. 8 x 11. Tuttle & Bailey Mfg. Co., 2 West 46th St., New York City.

Capitol Smokeless Boilers.—Booklet for the specification writer containing complete information, also Capitol Boilers, Square Type and Capitol Boilers, Winchester Type. Covers subject of these lines completely. United States Radiator Corp., Detroit, Mich.

Universal Safety Treads.—Data sheet with practical information covering all types of safety treads for use in all types of buildings. Also data sheet specifically covering anti-slip metal tread type. Universal Safety Tread Co., 40 Court St., Boston, Mass.

Von Duprin Self Relensing Fire Exit Devices.—A handbook on the subject. Illustrations of all types, sections and details. Complete instructions for specification and installation. Instructions for swinging doors. A very valuable book for every specification writer. 96 pp. 8½ x 11. Vonnegut Hardware Co., Indianapolis, Ind.

Wagner Data Book.—Catalog No. 19. Contains illustrations and descriptions of door hangers and tracks for overhead carrier systems, fire door fixtures and hardware specialties. Section and detail drawings and complete data for specifying. 176 pp. 8 x 11. Wagner Mfg. Co., Cedar Falls, Iowa.

Artists' and Drawing Material Catalog.—Complete catalog of everything required in the drafting room, fully described, illustrated and priced. 350 pp. F. Weber Co., Dept. PP 1220 Buttonwood St., Philadelphia, Pa.

Wheatley Tiles.—Portfolio of color plates showing application of faience tiles to floors, walls and chimney pieces, etc. Plates showing a large variety of tile inserts in polychrome. Stock mouldings in any color. 10 x 12. The Wheatley Pottery Co., Cincinnati, Ohio.

Not a House But a Home.—Large quarto portfolio containing perspectives, plans and elevations of twelve small houses, together with specifications, glossary of lumber terms and much other useful information. Arkansas Soft Pine Bureau, Little Rock, Ark.

Brief Wood Finishing Formulas.—Loose-leaf sheets with index, specifications covering all classes of wood finishing. 64 specifications. 8½ x 11. Berry Bros., Detroit, Mich.

Published by the same firm Natural Woods and How to Finish Them. Valuable notes covering all varieties of woods and their treatment. 93 pp. Convenient pocket size.

Elevator Door Closer and Positive Electric Interlock.—New publication on the subject indicated with detail drawings and specification data. 24 pp. 8½ x 11. Elevator Supplies Co., Willow Ave., Hoboken, N. J.

Architectural and Decorative Ornaments.—Complete catalog with 183 full page plates showing over a thousand different details. Handsomely bound in cloth. 9 x 12. Sent only in response to requests on firm letter-heads. Jacobson & Co., 241 East 44th St., New York.

Published by the same firm. A Book of Old English Designs. Handsome brochure containing 40 full page plates. 8½ x 11. Also; Geometrical Ceilings, 24 plates of designs covering the subject.

The Bull Dog Floor Clip.—Hand book covering subject of anchoring wood floors to concrete floor slabs without a fill. Blue prints showing details, specifications and complete working information. 24 pp. 8½ x 11. The Bull Dog Floor Clip Co., 108 N. 1st Ave., Winterset, Iowa.

Whatman Building Papers.—Book containing samples of all weights, textures and colors. H. Reeve Angel & Co., 120 Liberty St., N. Y.

Artists' Colours and Materials.—Catalog showing complete line of interest to all artists. 110 pp. 6 x 9. Winsor & Newton, 31 E 17th St., New York.

Zenitherm, The Universal Building Material.—Brochure in sepia showing application of this material on several interesting jobs. Detail drawings and complete data. 8½ x 11. Zenitherm Co., 405 Lexington Ave., New York.

The White House Line.—Catalog No. 14 covering sectional unit steel dressers suitable for the kitchen and butler's pantry, together with a line of medicine cabinets, broom closets, lockers and other similar equipment. 36 pp. Janes & Kirtland, 133 West 44th St., New York.

Best Bros. Keene's Cement.—Booklet on the subject of this material, containing much information, together with specifications covering all kinds of plastering, both plain and ornamental, artificial marble, etc. 24 pp. The Best Bros. Keene's Cement Co., Medicine Lodge, Kansas.

The Book of Roofs.—Handsome brochure with many color plates showing residences with colored roof effects. Specifications, detail drawings and much other useful data. 24 pp. 8½ x 11. H. W. Johns-Manville Co., 41st Street & Madison Ave., New York.

Published by the same firm, Underground System of Insulation. Covers subject fully with photographs and drawings. Engineering data, etc. 20 pp. 8½ x 11.

Morgan—777.—Data sheet announcing new framed-panel door suitable for use in connection with many types of modern buildings. 8½ x 11. Morgan Woodwork Organization, Oshkosh, Wisconsin.

The Heart of the Home.—Catalog No. 31 illustrates and describes complete line of kitchen ranges in all combinations, and other accessories for the modern kitchen, residence, hotel or club. 36 pp. Bramhall, Deane Co., 261 W 36th St., New York.

Architects' and Engineers' Built-Up Roofing Reference Series.—Volumes 2 and 3. Volume 2 covers steep roof specifications with blue prints, specification and explanatory text. Volume 3 deals with the subject of Roof Flashing in the same manner. Very valuable documents for the specification writer. Uniform with Volume 1 of this series. 30 pp. 8½ x 11. The Barrett Co., 40 Rector St., New York.

Church Furniture.—Brochure dealing completely with this subject with beautiful illustrations. 8½ x 11. 48 pp. American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Structural Slate in White or in Color.—Booklet with color plates describing an entirely new line, Struco Slate. 8½ x 11. The Structural Slate Co., Pen Argyl, Pa.

Stereo System of Vapor Heating.—Portfolio A.I.A. File No. 30-E-2 covering subject indicated. Layouts, drawings and specifications. 8½ x 11. Sterling Engineering Co., Milwaukee, Wis.

American Renderers.—A Series, each one of which shows a full page rendering reproduced in photogravure. Nos. 1, 2 and 3 are by Meade A. Spencer, William Gehron, and John Floyd Yewell, respectively. The other nine numbers will be published one each month. Address The American Pin Co., Waterbury, Conn.

Published by the same firm, Ampinco Showers, catalog describing modern shower equipment. Layouts for all types of bath-rooms with roughing-in measurements, etc.

The Story of Commercially Pure Iron.—Treatise on corrosion as applied to building construction. 48 pp. 6 x 9. American Rolling Mill Co., Middletown, Ohio.

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OPPORTUNITIES IN REMODELLING

EVERWHERE are innumerable buildings that should be remodelled. Either the growth of the city has changed the character of the neighborhood to such an extent that these buildings should be remodelled to serve a purpose in keeping with the new character of the section, or the ravages of time and the changes in taste in design have left them as unattractive and unprofitable relics of a by-gone day. Too often such buildings are carried along by their owners without adequate profit and allowed to fall gradually to pieces when they might be made suitable to present day needs and attractive with a comparatively small outlay. The increased revenue from the property would soon reimburse the owner.

It will pay the architects of this country to keep their eyes open for such opportunities as they go about their own towns. It will also pay them to devote special attention to the means of remodelling buildings. Many modern building materials are especially applicable to alteration work, as, for instance, the possibilities that lie in the overcoating of old clap-boarded structures with stucco having metal reinforcement, and the laying of new roofs over old ones.

The matter goes further than this, however, and includes the re-planning of the interior of buildings to fit them for new uses and the installation of new fixtures, hardware, flooring, etc.

The alteration of buildings sometimes is radical. For instance, the Knickerbocker Hotel at Broadway and Forty-second Street, New York, was turned into an office building some years ago. The Manhattan Hotel, also on Forty-second Street, was converted into an office building with a bank on the ground floor. At the present time the work of altering a church is under way at Seventy-first Street and Broadway, New York. The entrance lobby and other projecting portions of the front have been removed and, in their place and on the ground that was formerly a small lawn in front of the church, an office building has been erected and is nearing completion. Apparently it is the intention to make the entrance to the church through what would correspond to one of the transepts of a larger church. An existing door at the side street opens on the street. Several of the most prominent hotels are undergoing alterations that will convert the lower story in each case into stores to be rented.

The need for new store fronts is one of the most fruitful sources of alteration work. Some stores need the kind of show windows that present an unbroken surface of glass, some need deep show windows between which the entrance to the store extends for a considerable distance. Stores selling ready-to-wear clothing find this type of window especially profitable. Other stores which now have windows of single sheets of plate glass should have windows cut into panes of moderate size by heavy leading or metal muntins, in quaint effect, such as those adopted by an exclusive shop for men's hats on Fifth Avenue.

Some stores need as much clear glass as possible, others should have the effect of old time English shop windows. It is a question for the architect to study. Restaurants and tea rooms that lack atmosphere could do more and better business in some cases, depending upon the clientele they are prepared to serve, if they were decorated effectively in an architectural way. There is a lunch room in one of the smaller cities near New York that has a remarkably well designed enclosure of glass and wood of the old English type just inside the entrance door and well treated windows that give distinction to the place. The cost was evidently no greater than a commonplace treatment and the effect upon the business is undoubtedly excellent.

There is many a house that is depressing and unsightly when it might easily be made cheerful and attractive by remodelling at a moderate cost. Usually the really old houses should be left as they are, or carefully restored to their original condition. But there are many buildings that belong to that unfortunate period in which taste was at a low ebb and they need remodelling for the sake of appearance if for no other reason. The old New York brown stone front houses are gradually giving way before a general remodelling into homes of modern appearance and equipment and small apartments.

There is plenty of work of this kind for the architect to do in the suburbs and country. In an article on "Alteration Work," in this issue of PENCIL POINTS, the method of converting a former country residence into an up to date fraternity house is used as an example. The way in which the architects went about their problem in this particular case is justified by the results.

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Drawn for "Pencil Points" by Harry C. Wilkinson, Harkness Memorial, Yale University.
James Gamble Rogers, Architect.

SILHOUETTES OF AMERICAN DESIGNERS AND DRAFTSMEN, I

HARRY C. WILKINSON

In the series of articles entitled "Master Draftsmen," Mr. Francis Swales has written of those eminent architects and artists whose success was founded on their ability to draw. In this new series it is our intention to present the work of artists of ability who from choice or because of circumstances have specialized in one or another of the arts auxiliary to architecture.—Ed.

MANY successful men who have had all the advantages afforded by an education in the best schools seem to consider this training unimportant. They feel that their success is due to other things—application and perseverance in their work. The writings of Joseph Pennell, the greatest of living pen-and-ink artists, display that feeling. Others who have succeeded without school training often regret their lack of opportunity to obtain it. Still others regard all work as schooling, and the schools of experience and adversity as the best teachers. Experience brings a man in contact with other men whose ideas he absorbs and combines with his own. The subject of this sketch is an example of the office-trained designer who has acquired his skill by self-training and office experience. His progress from office boy to one of the outstanding delineators of the day has been the result of his own serious application.

Harry C. Wilkinson, when a boy, lived about ten miles from Poland, Maine, and during the summers he worked at the Poland Spring Hotel as a bell hop. Through this employment he became acquainted with Mr. E. P. Ricker, the senior member of the firm of Hiram Ricker & Sons, the owners. This association was to serve Wilkinson later on in his work.

After a year's experience in a small architectural office in Lewiston, Maine, Wilkinson took a Civil Service examination, passed and went to Washington to become a draftsman in the office of the Supervising Architect of the U. S. Treasury Department. During his free time, principally in the evenings, he studied pen-and-ink rendering, using the portfolios of D. A. Gregg, the books of Charles D. Maginnis, Joseph Pennell and plates by Herbert Railton as guides.

He soon developed an excellent quality of line and an understanding of simplicity of composition. The opportunity came to make some perspective drawings for the Supervising Architect with the result that during the next twelve years Wilkinson rendered nearly all the perspectives made in that office, which in addition to Post Offices and other buildings, included the perspective drawings of the Government portions of the St. Louis Exposition, the Portland, Oregon, Exposition, and the Buffalo, N. Y., Exposition. We do not believe that it is an overstatement to say that Wilkinson's pen drawings published during the years of 1899-1911, have had an important influence upon the work of the whole present generation of draftsmen who render in pen-and-ink.

While Wilkinson was employed in the Supervising Architect's office, Mr. Ricker, of the Poland Spring Hotel, gave him the commission to design the spring house and bottling works at Poland. Wilkinson also did a new hotel and several additions to the present Poland Spring House. This work was all done while he was employed in the office of the Supervising Architect in Washington.

At about this time there was an economy streak in the Administration and Wilkinson, together with eighty other men, was laid off. This proved to be a good thing for him for he found employment as a designer and went ahead faster than if he had remained with the Supervising Architect.

Upon leaving Washington, Wilkinson came to New York and found a position as perspective draftsman in the office of Francis S. Swales, who later took him to Montreal where he spent about a year, returning to Washington for a short time. He then rejoined Mr. Swales in Canada, at



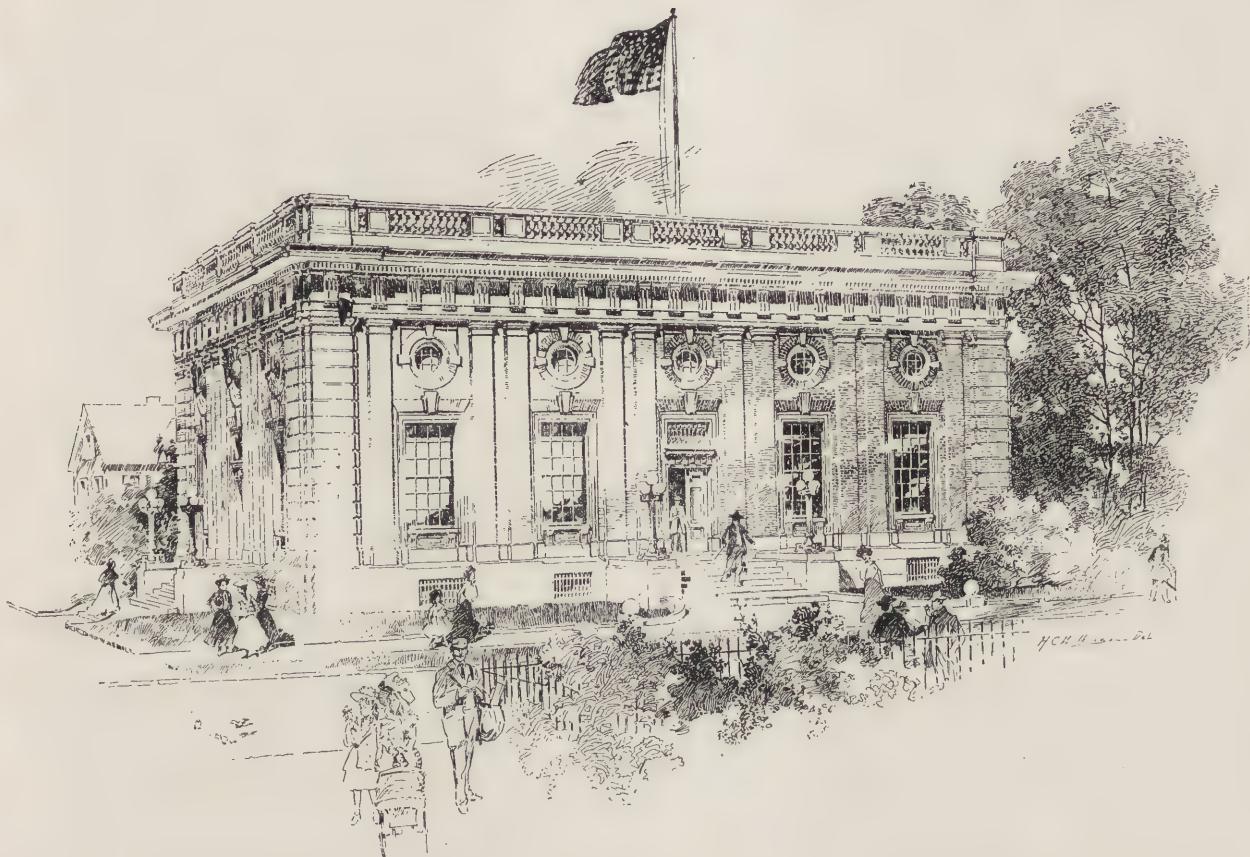
Harry C. Wilkinson

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Drawn for "Pencil Points" by Harry C. Wilkinson, Harkness Memorial, Yale University.
James Gamble Rogers, Architect. Portion of Drawing at Actual Size of the Original.

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*Pen and Ink Drawing by Harry C. Wilkinson. U. S. Post Office, Rome, N. Y.
James Knox Taylor, Supervising Architect.*

Vancouver, B. C., where he remained three years. The work there, Wilkinson feels, was a great help to him in increasing his knowledge of architectural styles and detail.

From Vancouver he went to Toledo then to Baltimore, working a short time in each of these cities, then he returned to the city he regards as his home, Washington, and there entered the office of Clarke Waggaman where he was engaged in designing and making perspectives. He ably assisted Mr. Waggaman in the design of the unique and beautiful "St. Mark's Café". This charming bit of garden architecture attracted nation wide attention and was mentioned in Sinclair Lewis's novel "Main Street" in these words—"She took them to St. Marks for dinner. . . . She was proud to point out a Senator and explain the cleverness of the canopied garden." The high standard maintained by Mr. Waggaman gave further help and inspiration to Wilkinson. During the war, while in this office, he worked on the designs for the Navy Yard Housing. After the death of Mr. Waggaman he remained with Mr. Waggaman's partner, George N. Ray, who carried on the general practice of architecture on the same high plane as that maintained by Mr. Waggaman. At about this time Wilkinson designed the interior decorations for a theatre in his free time, using the reference works in the Congressional Library. Mr. Roberts, in charge of the

Art Department of the Library, becoming interested in Wilkinson's work and, always endeavoring to make his department of the greatest practical use to designers, invited Wilkinson to make his drawings in the Library. This he did producing several water colors of the theatre decorations there.

Wilkinson joined the staff of J. H. de Sibour where he was one of the latter's chief designers. From this association he gained still further knowledge and skill in design. During this time Mr. de Sibour often called upon Wilkinson to go upon the staging and paint the decorations directly upon the walls. An example is the beautiful Pompeian Room in the new hotel, the Lee House in Washington, where Wilkinson painted the various Pompeian figures, small birds, animal forms, etc., in oils. After about two years and a half with Mr. de Sibour, Wilkinson came to New York and joined the organization of James Gamble Rogers, by whom he is now employed.

It is interesting to note the persistence with which Wilkinson has pursued his purpose. While in the first architectural office in which he worked in Lewiston, Maine, a report from the Supervising Architect's office in Washington came to the office and fell into his hands. He noted that it was profusely illustrated with drawings by Charles D.

(Continued on page 53)

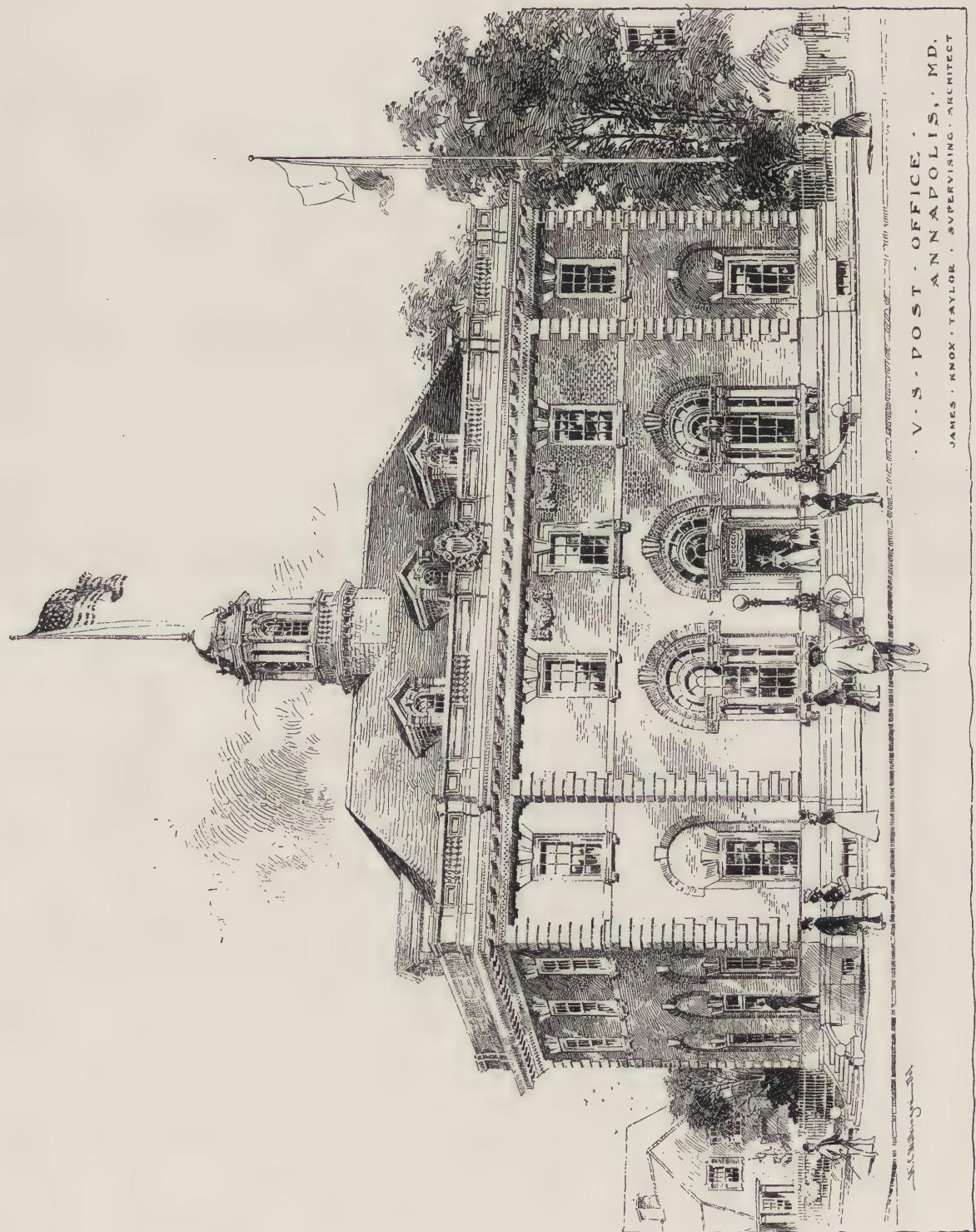


Drawing by Harry C. Wilkinson. Wilson House near Mt. Vernon, Va. Clarke Wagaman and George N. Ray, Architects.

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Drawing by Harry C. Wilkinson. Old House in Georgetown, D. C.



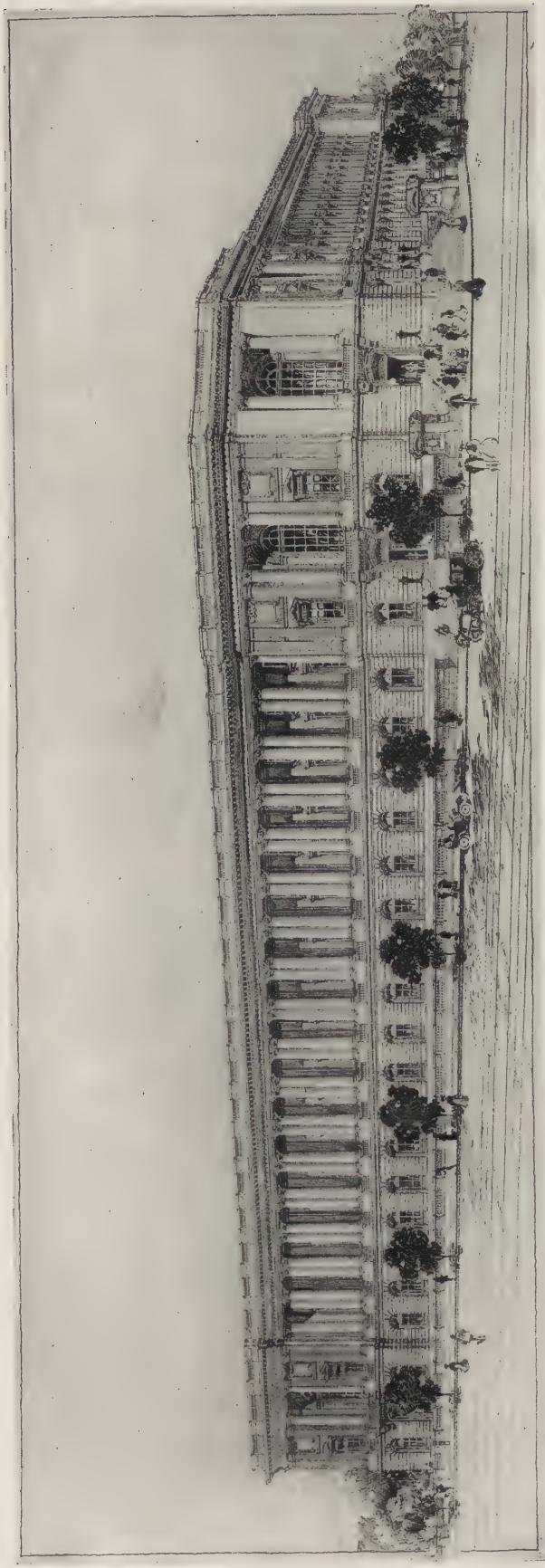
U. S. POST OFFICE
ANNAPOLIS, MD.
JAMES KNOX TAYLOR, SUPERVISING ARCHITECT

Drawing by Harry C. Wilkinson.

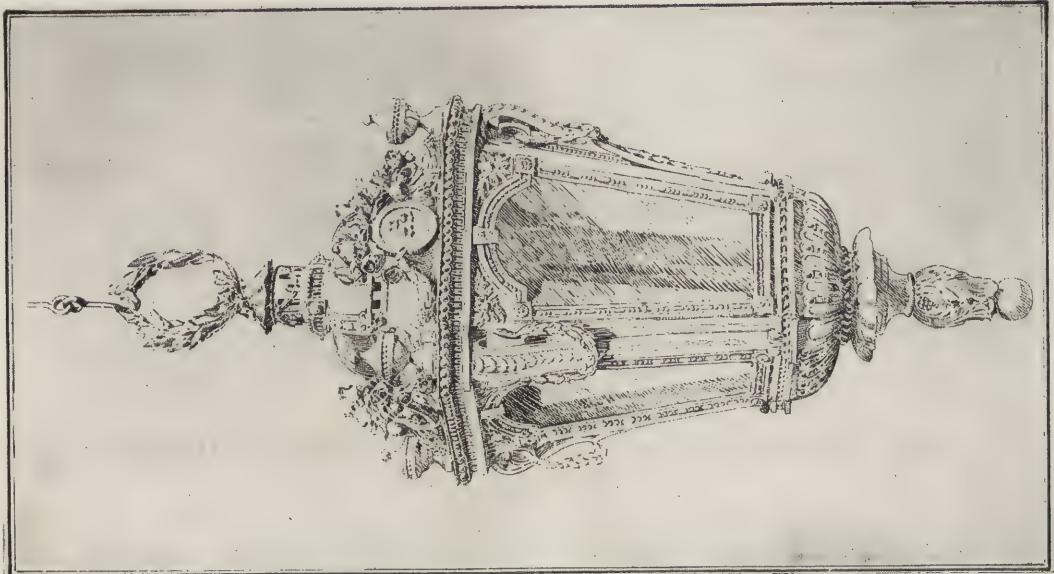
PENCIL POINTS



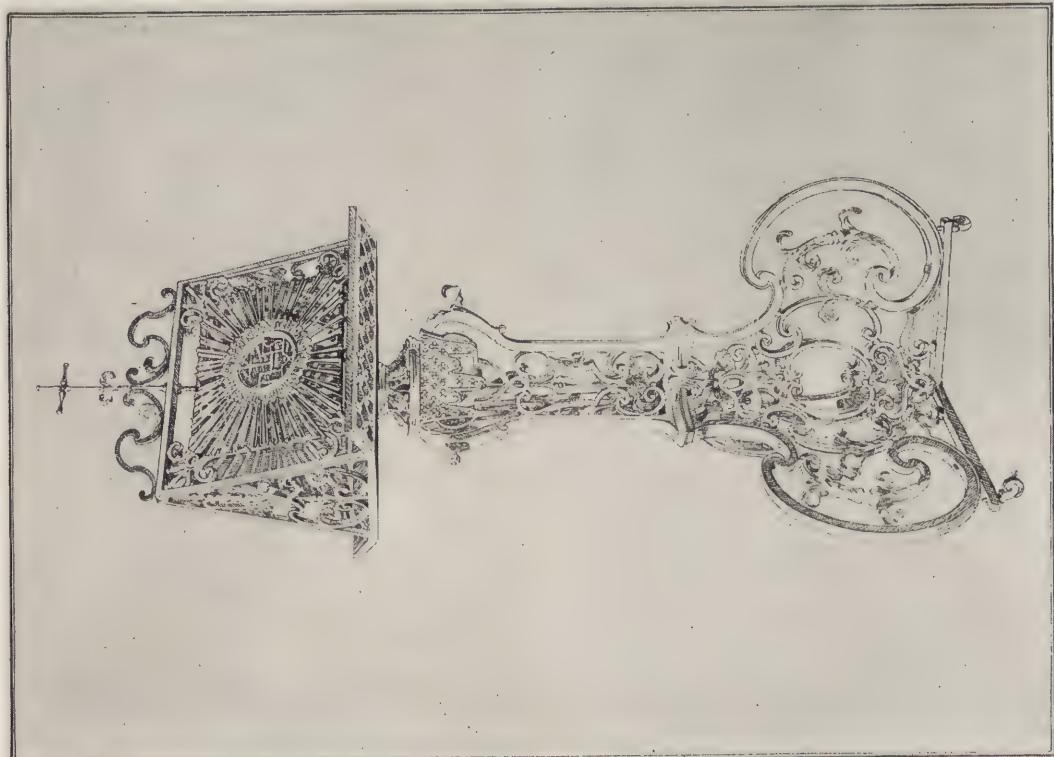
Drawn by Harry C. Wilkinson.



Pen and Ink Drawing by Harry C. Wilkinson, U. S. Senate Office Building, Washington, D. C.



Cast and Wrought Bronze Lantern.
Wrought Iron Lectern. *Drawn by Harry C. Wilkinson.*



PENCIL POINTS



Composition Drawn for "Pencil Points" by Harry C. Wilkinson. Lee Mansion, Arlington, Va., with Sheridan Monument in Foreground and table-like Monument to L'Enfant at the Right.

PENCIL POINTS



Drawing by Harry C. Wilkinson

(Continued from page 45)

Maginnis and this gave him the idea that perhaps the Supervising Architect might be able to use a man in his office who could do pen-and-ink drawing. Therefore, he sent to Washington for the papers and when the sample examination paper came he made a point of studying to qualify himself in the subjects required. He had already begun the practice of pen-and-ink drawing, working from illustrations in the architectural magazines.

He passed the examination and went to Washington where he worked in the office of the Supervising Architect with a number of well trained designers. This association taught him much, particularly the

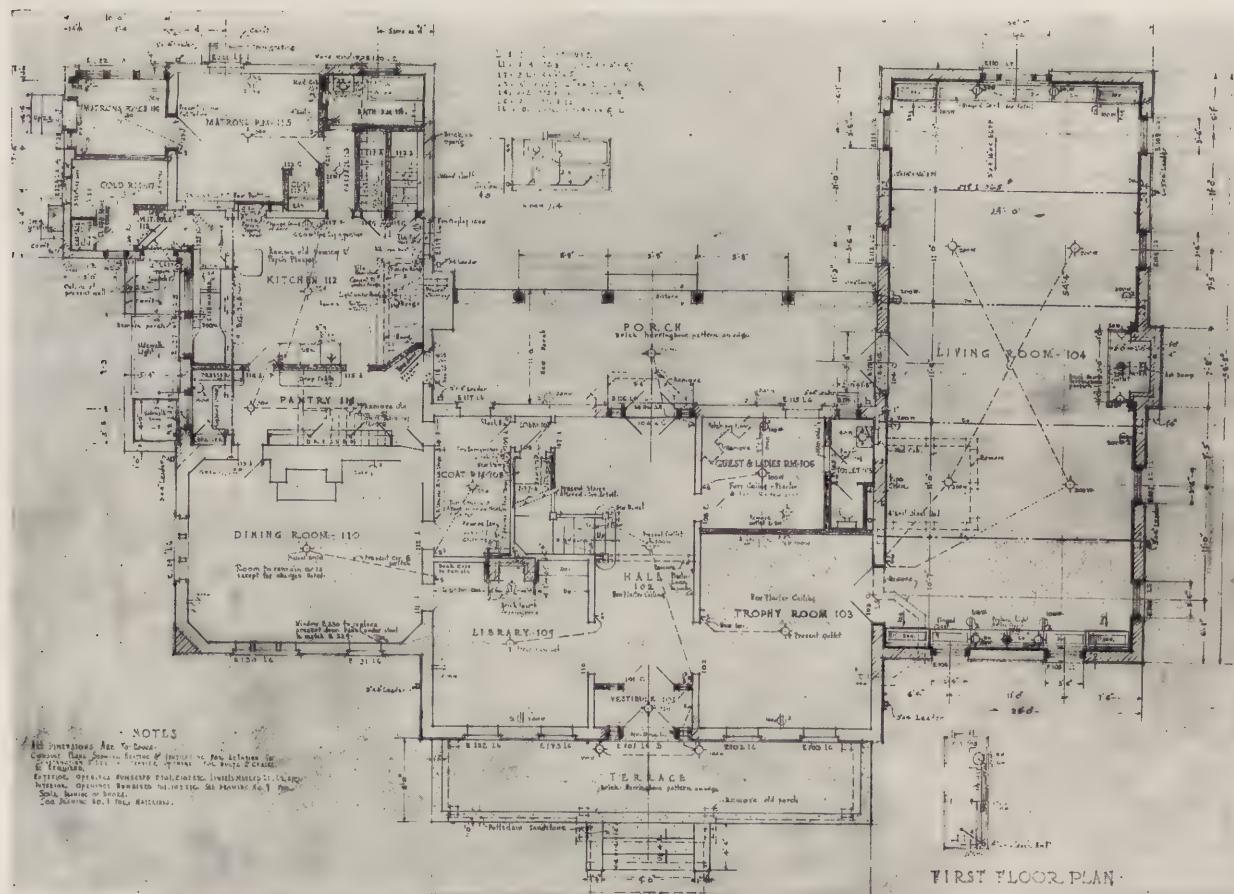
proper architectural values of projections. It is regarded by Wilkinson as the beginning of his development in design. Since he left the office of the Supervising Architect his work has been almost entirely confined to design, and he has done only occasional perspectives for the architects by whom he has been employed.

It is notable that Wilkinson has made his way from a little office in a small town to a number of the best offices in this country through office training, home study and the consistent and intelligent use of the free libraries. It is also to be noted that he showed excellent judgment in always connecting himself with architects who were themselves able designers.—E. C.

PENCIL POINTS



North Elevation



First Floor Plan

*Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc.,
Canton, N. Y. Bastow & Way, Architects.*

DRAFTING ROOM PRACTICE, PART II

ALTERATION WORK

BY HAROLD D. WAY

OF THE varied types of work falling to the lot of an architect, that most full of pitfalls is the alteration job.

It is common experience to find as work progresses that too meager information was had as to the existing building and too indefinite information was imparted to the contractor by drawings and specifications. In the nature of things we cannot get rid of these inherent difficulties, but we can reduce them to a minimum, leaving only those things undetermined that come to view as work is uncovered at the job.

There are, as we all know, these two distinct yet interrelated features of our problem; that of securing complete essential data at the existing building in so far as is possible and that of proper presentation of this data to show clearly the new and the old work.

The first step is fundamentally the reverse process to preparing drawings and specifications for a new building and not nearly as pleasant. But if attacked in the spirit of doing a real job of it, the odium is for the most part dispelled.

Just how much data should be obtained for the preliminary sketch stage and how much left for the working drawing stage depends upon circumstances—including the architect's temperament in leaving things to chance and the certainty of the job going ahead. At the beginning, however, the data should be noted in such form that additional information may be easily added. The making of a drawing of a building "as is", is more than an office boy's job. It is a simple matter to make a note that the "contractor is to verify all measurements at the building" and it is necessary, but at the same time the architect should take pains to give accurate dimensions in order to avoid unpleasant surprises.

The drawing illustrated was made at the job by plotting on cross-ruled co-ordinate paper tacked down on a small light drawing board. The sketch was drawn to scale with a surprising degree of accuracy. Dimensions are, where possible, given as running dimensions, that is, they are referred to the same datum. For instance, both jambs of a window are fixed by measurements from each to the corner of the building. It is not a new or novel idea, but one not always followed.

In this way the troublesome accumulative error is avoided. The overall dimensions were taken first, the exterior walls plotted, giving the whole periphery, going completely around the building back to the starting point as a check. Minor dimensions

were then filled in, in systematic order and, wherever possible, given as running dimensions. If not so given, any deviation from the general rule should be clearly noted.

The heights should in the same way be referred to the top of the watertable, first floor level or some definite datum. Sill heights and heads of openings can then be referred to the nearest floor level.

The stone courses or brick courses, pitch of roofs or heights to ridge must be determined. The details of cornices, belt courses, sills, door and window frames and reveals, all mouldings and the like must be obtained. Location and size of leaders, size of beams and direction, size of soil lines and location are obvious items, of course. The essential thing is to get all of them and to title them or key them up to the general plans and elevations.

A survey should be insisted upon and should be complete, showing elevations or contours, location, kind and caliper of trees, presence of rock, location of old wells, level of water because of liability of causing seepage and possibility of necessitating waterproofing. Grades at the building should be checked by the architect by measurements taken to the watertable, or whatever datum the architect has selected.

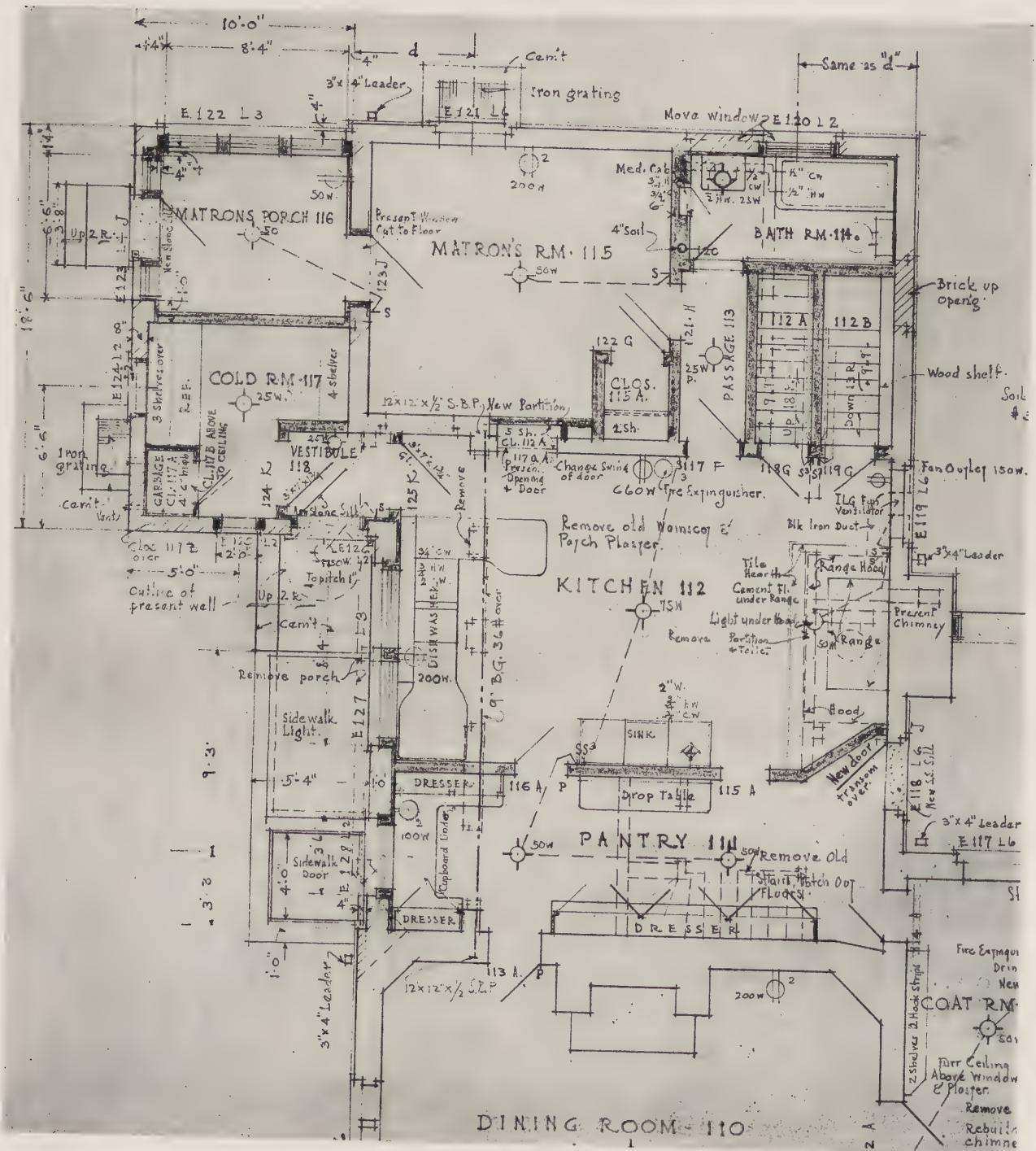
A camera used with a normal and a wide angle lens is a wonderful help and saves several exasperating excursions to the site. Views taken straight on to approximate elevations, accompanied by other detail photographs of both exterior and interior, are most useful. In the work illustrated a goodly number of photographs were taken of the interior and exterior. They were not only an assistance, but a prime necessity because of the distance of the job from home in comparison with its size. Photographs help one to remember. What is even more important, they may be enlarged, sketched over in pencil or ink directly on the print and the image on the print may then be bleached, wholly or in part, as desired, to show the drawing.

Of equal importance to the data for the drawing are the notes as to materials and finish, as well as notes on electrical work, plumbing, heating and the like.

On the exterior of the building there are the problems of the kind and condition of masonry materials; spalled brick and stone that may need to be replaced; broken or cracked stone, settlement; condition of wood trim and painted work—should the old paint be burned off; materials and settlement of driveways and walks.

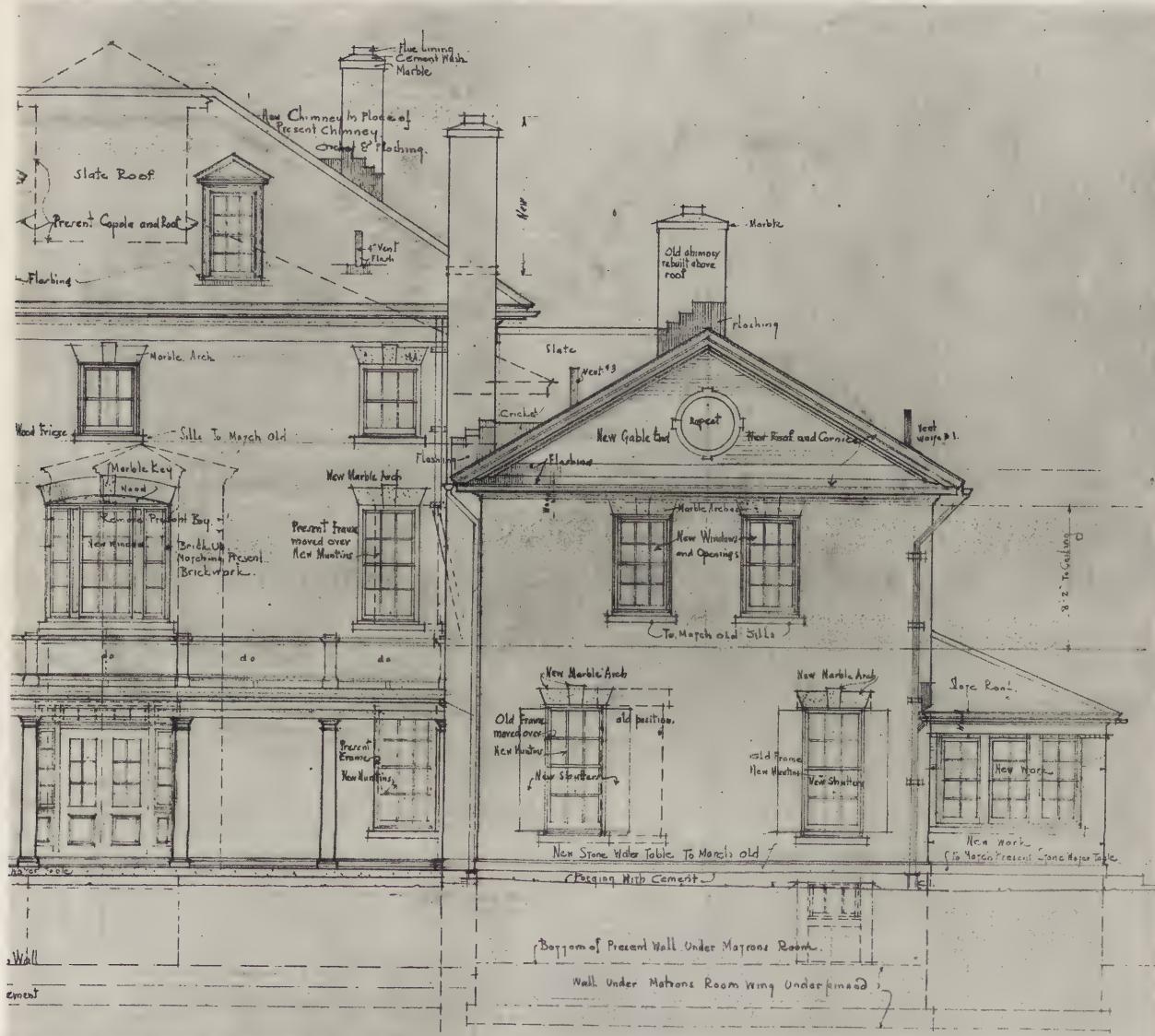
On the interior of the building it will be found most convenient to list the materials and finishes of

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Portion of 1st Floor Plan—Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y. Bastow & Way, Architects.

PENCIL POINTS

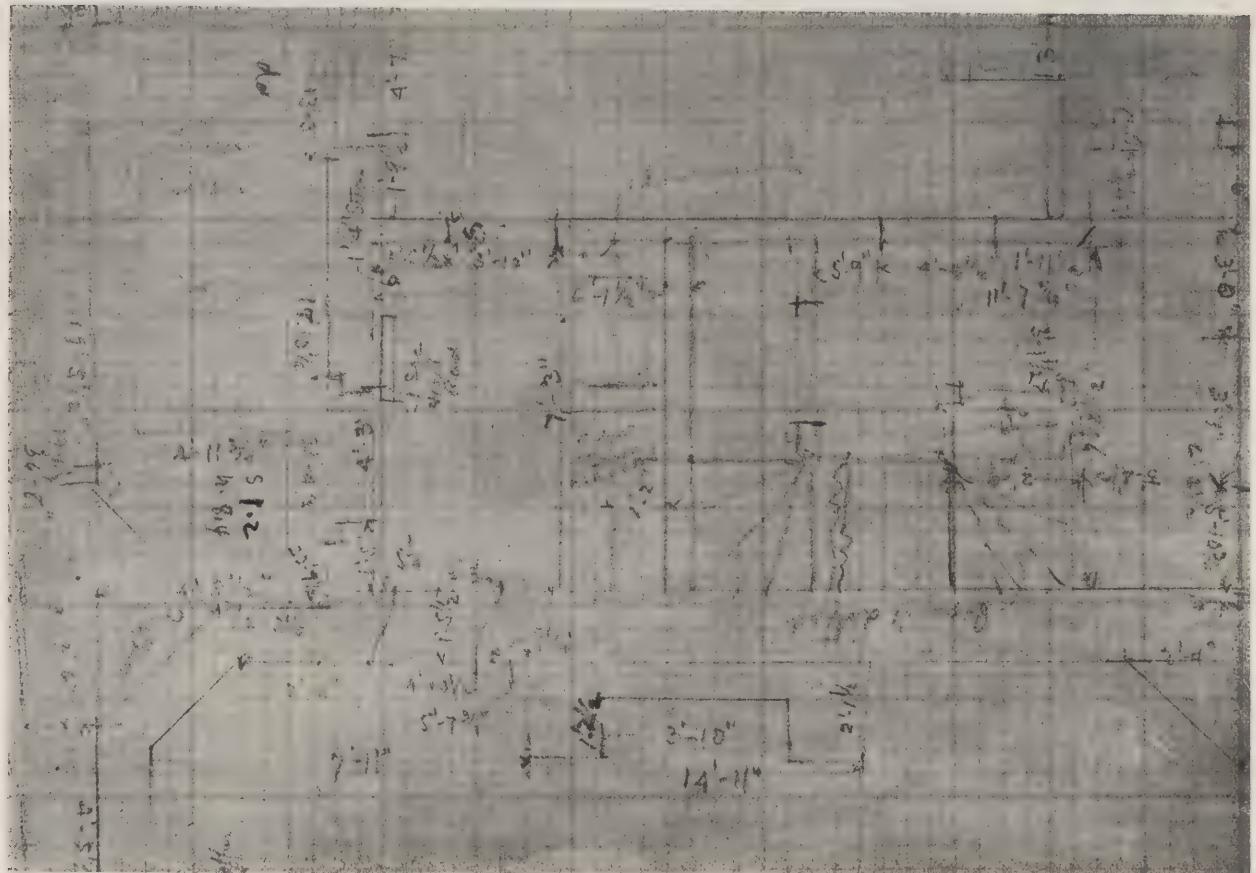


Portion of South Elevation—Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y. Bastow & Way, Architects.

PENCIL POINTS

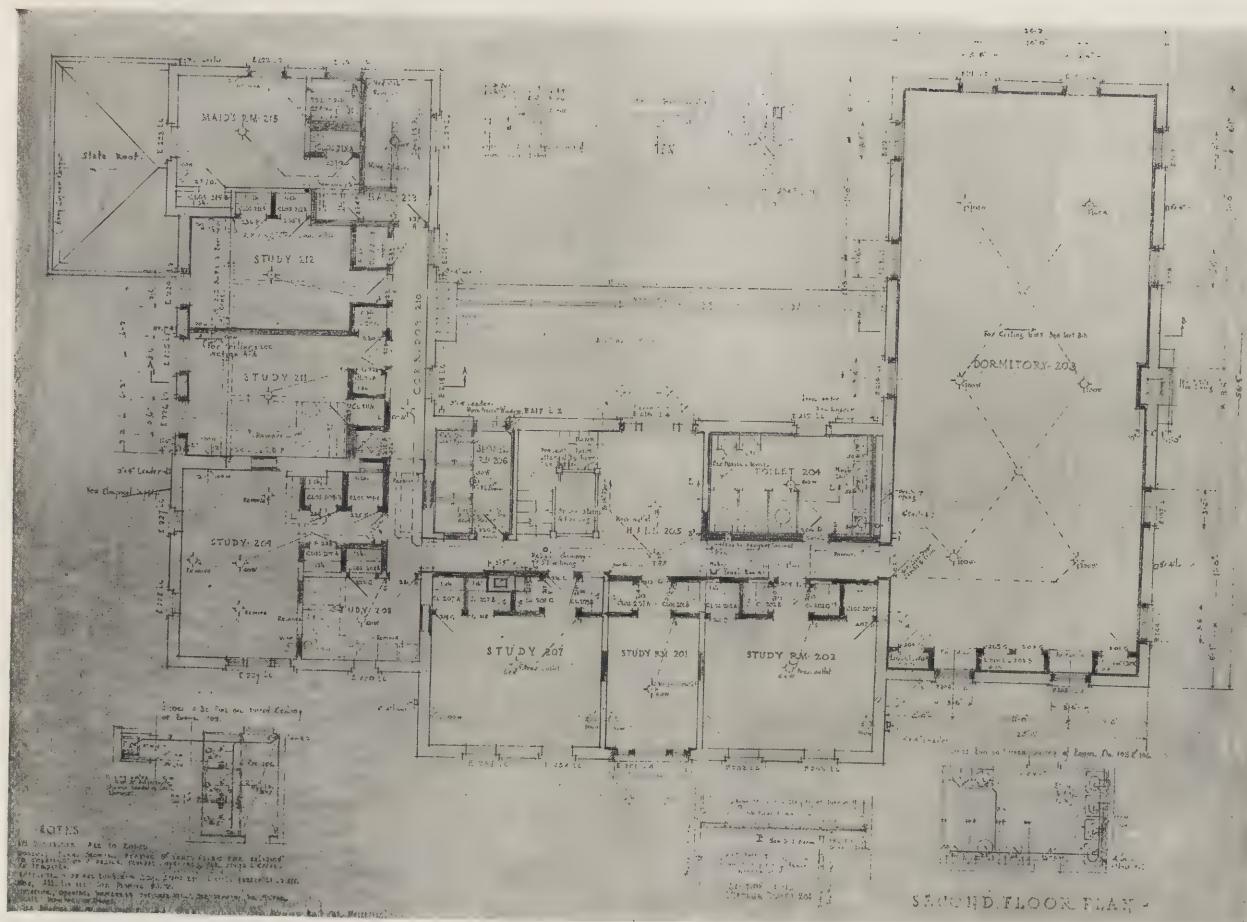


North Elevation—Proposed Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y. Bastow & Way, Architects.



Portion of Floor Plan Drawn to Scale at the Job on Cross-ruled Co-ordinate Paper.

PENCIL POINTS



*Second Floor Plan—Alterations for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc.,
Canton, N. Y. Bastow & Way, Architects*

rooms separately, including also the electrical fixtures and hardware. First there is the material, finish and condition of flooring, width and direction of flooring; notes as to borders; material and finish of trim, making sure that a detail of trim, and paneling of doors has been made; plastering of walls and ceiling; kind and condition of plastering; notes as to papered and painted surfaces; design, dimensions and condition of electric fixtures and in the same way notes on hardware.

The system of electric wiring, whether tube, knob and loom or conduit work, should be noted; also location, size and type of panel boards, cut-out and meter boards together with general information as to the point to which the service company brings its service, whether overhead or underground, kind of current furnished, direct or alternating, voltage, number of cycles, phase, two or three wire system and amperage permitted for branch circuits by local regulations. In a similar way information must be obtained on plumbing and heating.

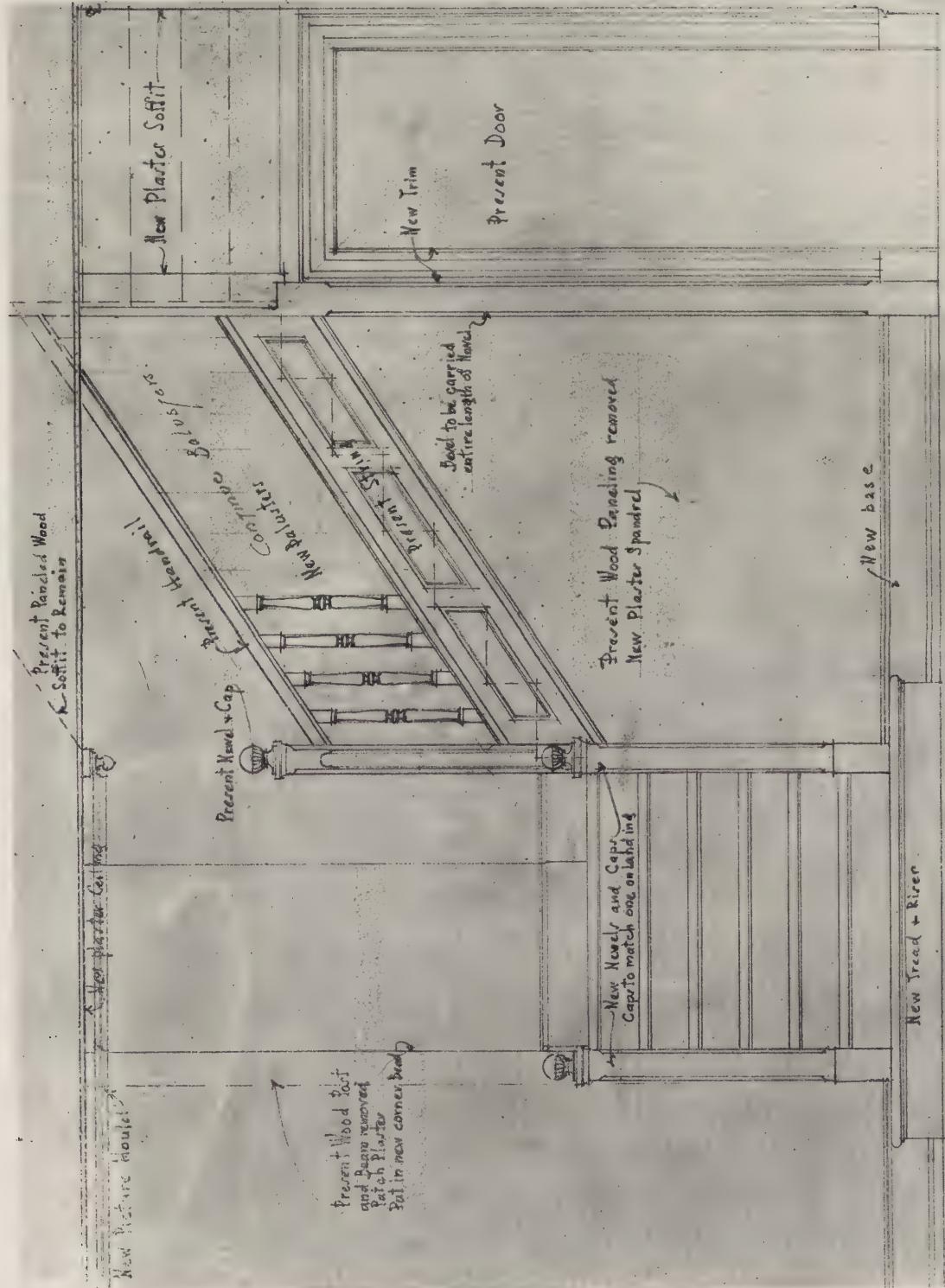
Inquiry should be made as to cost and supply of materials in the local market. It is always

embarrassing to have the contractor report to the owner that a considerable saving could have been affected had the specifications called for other materials and finishes. Not only that but the best service cannot be rendered unless one is fully informed and can make decisions intelligently.

The outline just given is suggestive and will, we trust, stimulate simplification or elaboration as may be necessary for the best results in any particular case. They should be arranged in tabular form to be most useful. Of course a checking list of this sort might be made too cumbersome and this would defeat its purpose. The notes given are to be considered as basic and illustrative rather than final.

The next problem is to present the drawings in such a way that it will be clear to the contractor and workmen what is new and old work.

The walls and floors and all material shown in plan or section is logically shown in outline for old work and the hatching and material indicated for new. Old work to be removed must be shown but for clarity is dotted and accompanied with a note that it is to be removed. This applies to elevations as well as plans. Copious notes should be provided



1/4" SCALE ELEVATION OF MAIN STAIR

Elevation of Main Stair—Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y. Bastow & Way, Architects.

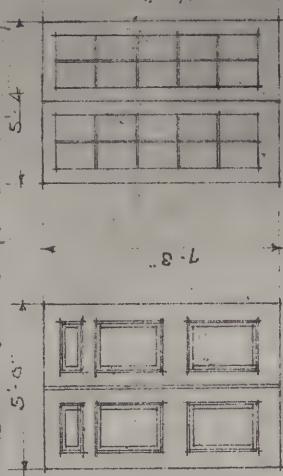
SCHEDULE OF MATERIALS & FINISHES

ROOM DESIGNATION	FLOOR	BASE	Wainscot Cap	Walls	Picture Moulding	Other Trim	Doors	Ceiling	Stash & Window Frame	
									NC	PT3
STORAGE RM.	NO. 1	CEM	SELVANE	—	—	—	—	—	PT3	PT3
STORAGE RM.	2	EARTH	—	—	—	—	—	—	PT3	PT3
STORAGE RM.	3	CER.	SELVANE	—	—	—	—	—	PT3	PT3
COAL RM.	4	—	—	—	—	—	—	—	PT3	PT3
BOILER RA.	5	CER.	—	—	—	—	—	—	PT3	PT3
STORAGE RM.	6	CER.	—	—	—	—	—	—	PT3	PT3
STORAGE RM.	7	CER.	—	—	—	—	—	—	PT3	PT3
STORAGE RM.	8	CER.	—	—	—	—	—	—	PT3	PT3
VESTIBULE	101	Q-T	—	—	—	—	—	—	PT3	PT3
HALL	102	P.M.	WAX	CH	WAX	—	PL	CTX	BCH	ST-W
TROPHY RM.	103	P.M.	WAX	CH	WAX	—	PL	CTY	BCH	ST-W
LIVING RM.	104	OAK	WAX	OAK	WAX	—	PL	CTX	PM	ST-W
TOILET	105	OAK	WAX	OAK	WAX	—	PL	PT3	PM	PT3
GUEST RM.	106	P.M.	WAX	CH	WAX	—	PL	PT3	PM	PT3
LOBBY	107	P.N.	WAX	PM	WAX	—	PL	PT3	PM	PT3
STARWAY	107-A	Y.P.	PT3	Y.P.	PT3	—	PL	PT3	PM	PT3
COAT RM.	108	BCH	WAX	PM	WAX	—	PL	PT3	PM	PT3
LIBRARY	109	P.M.	WAX	WAX	WAX	—	PL	PT3	PM	PT3
DINING RM.	110	P.M.	WAX	WAX	WAX	—	PL	PT3	PM	PT3
PANTRY	111	LIN.	WAX	PM	WAX	—	PL	PT3	PM	PT3
KITCHEN	112	LIN.	WAX	PM	WAX	—	PL	PT3	PM	PT3
STAIRWAY	112-A	V.P.	ST-W	Y.P.	ST-W	—	PL	PT3	PM	PT3
STAIRWAY	112-B	Y.P.	PT3	Y.P.	PT3	—	PL	PT3	PM	PT3
PASSAGE	113	CGP	ST-W	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
BATH RM.	114	LIN.	WAX	Y.P.	EN	—	PL	PT3	Y.P.	PT3
MATRONS RM.	115	BCH	WAX	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
CLOS 5-	115A	BCH	WAX	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
NATION'S PORCH	116	BCH	WAX	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
COLD RM.	117	CGP	ST-W	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
GARBAGE OR CLOS	117A	TIN	PT3	—	—	—	TIN	PT3	TIN	PT3
CLOS	117B	Y.P.	—	—	—	—	—	—	Y.P.	PT3
VESTIBULE	118	CGP	ST-W	Y.P.	PT3	—	PL	PT3	Y.P.	PT3
STUDY	201	P.M.	WAX	ST-W	—	—	PL	—	PT3	PT3
STUDY DORMATORY	202	DCP	WAX	PA ST-W	—	—	PL	—	PT3	PT3
	203	ECN	WAX	ECN ST-W	—	—	PL	PT3	PT3	PT3
TOILET	204	—	—	—	—	—	PL	—	EN	EN
HALL	205	P.M.	WAX	—	—	—	PL	—	PT3	PT3
SHOWER RM.	206	—	—	—	—	—	PL	—	EN	EN
STUDY	207	BCH	WAX	PA	WAX	—	PL	—	PT3	PT3

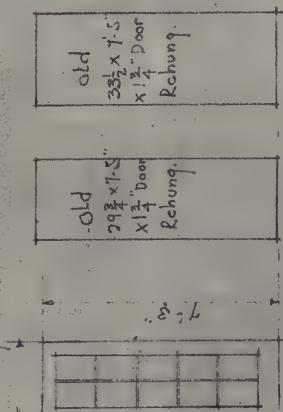
Schedule of Materials and Finishes. Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y. Bastow & Way, Architects.

DOOR SCHEDULE

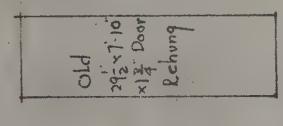
A. Present Doors To remain in position



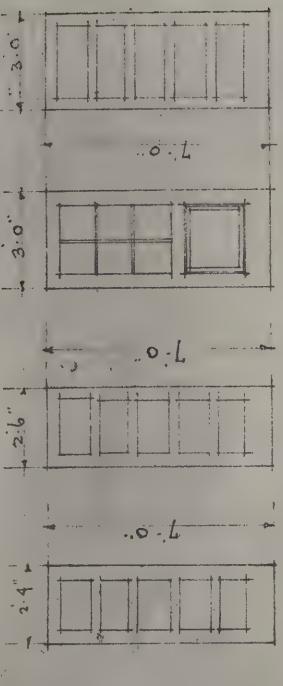
B. 24" White Pine
Detailed.



C. 1 1/4" White Pine
Detailed.



D. 6 Panel Cherry
Door B. Walnut
Panel Mould.



E. 6 Panel Cherry
Door B. Walnut
Panel Mould.

K. 1 1/4" Birch
Door.

J. 1 1/4" Panel Birch
Stock Door.
Detailed.

H. 1 1/4" Panel Birch
Stock Door.

G. 1 1/8" Panel Cherry
Door B. Walnut
Panel Mould.

F. 1 1/8" Panel Cherry
Door B. Walnut
Panel Mould.

L. 1 1/4" Panel Birch
Door Rehing.

M. Metal Covered
Door, Frame & Trim.
Detailed.

N. 6 Panelled
Door, Painted
Mould.

O. 6 Panelled
Door, Painted
Mould.

P. 1 1/8" Panelled
Door, Painted
Mould.

Q. 1 1/8" Panelled
Door, Painted
Mould.

R. 1 1/8" Panelled
Door, Painted
Mould.

S. 1 1/8" Panelled
Door, Painted
Mould.

T. 1 1/8" Panelled
Door, Painted
Mould.

U. 1 1/8" Panelled
Door, Painted
Mould.

Door Schedule—Alterations to Fraternity House for Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y.

Bastow & Way, Architects.

PENCIL POINTS

calling for bonding of new to old work, and underpinning where required.

The shifting of doors from one position to another is often taken care of with notes and long distance arrows but this is, to say the charitable thing, confusing. The scheme of putting this information in a door schedule, as illustrated, works out very well.

Materials and finishes are taken care of by a schedule simplified for this particular job. Old material is noted by an abbreviation and the number of coats of paint which varies on old work is noted by Pt. 4 or Pt. 2. The schedule of materials and finishes simplified the writing of the specifications, as it always does, besides giving a good check on their completeness. Schedules have sometimes been criticized because they are difficult to read but they are really not much different in this respect from the average specification and are certainly easier to prepare than the lengthy description.

The problem becomes, in the ultimate analysis, that of putting oneself in the other fellow's shoes, to think out in advance what information will be required by everyone connected with the work.

Again photography comes into play by enabling one to supply photographs to accompany the plans and specifications for the taking of bids. No trick should be omitted that will serve to lessen the uncertainty and the gamble of the alteration job.



Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Before Alterations.

These photographs; for instance, are of service to the estimator, supplementing his visit to the site and making the problem more concrete in the mind of the contractor; thus, we have immediately removed some of the gamble for the owner and probability of annoyance and loss of time for the architect.

It had been the writer's aim to give a listing, under the various heads, of items that need to be looked out for but to be complete such a list would have to fit all types of construction and city and country work, being probably as uninteresting as it would be difficult to prepare. However, there have been a number of checking lists published from time to time that would be helpful in outlining such a thing for one's own use. This may be done with a degree of elaboration that is in accord with the particular type of work in hand and with conformity to the tradition of the office with respect to system or lack of it.

Those items that apply equally well in new work do not call for more than a passing reference here. The listing of general information required for the various engineering features of the problem has already been mentioned. Then there is the information that the architect should turn over to the engineer. For instance, the use to which rooms are to be put is of prime importance to the heating engineer. One might go a step further in this matter of checking lists by preparing one on those items that should be taken up with the owner and things to watch out for in the early stages of design, including such uninspiring problems as removal of ashes.

These lists have value in that they make for clear thinking right from the beginning, both in the matter of collecting data and of presentation of work contemplated. Those opposed to system might argue against such lists but if ever system is required it is for the alteration job.



Detail of Stairway Before Alterations. Alpha Omicron Chapter, Alpha Tau Omega Fraternity, Inc., Canton, N. Y.

WASTE

A PLEA FOR A BETTER AND MORE ECONOMICAL SYSTEM OF ESTIMATING

BY RAOUL C. GAUTIER

"Not very long ago, the United States Chamber of Commerce formulated a code of business ethics, where the following may be found: Waste in any form,—of capital, labor, services, materials or natural resources,—is intolerable, and constant effort will be made toward its elimination."

THE father of quantity surveying in this country, G. Alexander Wright of San Francisco, in expressing his hopes for a better system of estimating than that prevalent at the time (1914) said: "Happily we are a progressive people and things are not done today as they were twenty or thirty years ago."

Yes, we are a progressive people, and yet what progress have we made in our methods since 1914? What has been or is being done to eliminate this intolerable waste of labor and services? Nothing, since Architects and Engineers are still making plans often incomplete, writing specifications often indefinite, and Contractors are still estimating in the same manner, wasting every year hundreds of thousands of dollars in "taking off quantities" in the same old way.

Few Architects, Engineers or Owners realize the extraordinary amount of work and energy entailed by the making of an estimate, particularly in the short time usually granted to the Contractor. Neither do they realize the stupendous amount of money thus spent.

It is our purpose to illustrate by means of a concrete example, the amount of work done and the amount of money spent on the making of an estimate.

Not very long ago, bids were wanted for an industrial building having a large area of working space, a large showroom and offices, and plans were sent to thirteen general contracting concerns. It was necessary for the general contractor to make or obtain a structural design for reinforced concrete work, to take off quantities for same as well as for the work he intended to handle himself, to obtain prices from material concerns, and in addition, to obtain and analyze proposals from sub-contractors to make sure that they had taken off all that was required, all in ten days, the length of time allowed to prepare the bids.

The number of sub-bids received for each of the thirty-two (32) main sub-divisions is shown below:

1. Wrecking	3
2. Excavating	6
3. Shoring & Underpinning	3
4. Reinforced Concrete (Design)	4
5. Masonry	2
6. Waterproofing	3
7. Granite	4
8. Limestone	8
9. Structural Steel	2

10. Steel Sash	4
11. Hollow Metal Windows	4
12. Store Fronts	3
13. Glass & Glazing	6
14. Marble & Slate	4
15. Terrazzo	7
16. Miscellaneous Iron	5
17. Wire Partitions	7
18. Steel & Glass Partitions	3
19. Mill Work	2
20. Lathing & Plastering	4
21. Kalamein & Tin clad Doors	6
22. Hollow Metal Doors	4
23. Elevator Doors	3
24. Roofing & Sheet Metal	5
25. Painting	8
26. Ventilators	2
27. Heating	6
28. Plumbing	4
29. Sprinklers	5
30. Electric Wiring	4
31. Elevators	6
32. Dumbwaiters	7

Altogether 144 sub-bids or an average of 4.5 per trade.

The building in question was estimated by local contractors only, and naturally, several general contractors received bids from the same sub-contractors.

If we assume, for the sake of argument, that each of the sub-contractors figuring on the job sent his proposal to one-half of the general contractors, we find that approximately 300 sub-contractors had to take off and list quantities. This operation, including the overhead thereby incurred, costs as much as \$200.00 for some of the trades and as little as \$10.00 for others. We shall assume the average to be \$25.00, and the general contractor's average cost for taking off his own quantities and analyzing the sub-contractor's bids shall be assumed at \$200.00.

Under these assumptions, the total cost, not of estimating, but merely of taking off quantities and listing them, runs as follows:

Sub-contractors 300 @ \$ 25.00—\$7,500

General Contractors 13 @ 200.00— 2,600

TOTAL \$10,100

For a job costing in round figures \$400,000.00, this totals approximately 2.5% of the cost of the

(Continued on page 90)

PENCIL POINTS

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PLATE XXXVII



Courtesy of Kennedy & Co.

PENCIL STUDY BY TROY KINNEY FOR HIS ETCHING
"SUMMER DAY."

An unusually interesting life drawing is that by Troy Kinney which is reproduced on the other side of this sheet. The tenderness and freedom of the rendering of the subject is remarkable and the technique by means of which this result is accomplished is well worth studying. It will be noted that the outlines vary greatly, width and density giving much of the expressiveness to the drawing. While the shading is done largely in distinct, simple pencil strokes there is nothing of the mechanical or rigid about it, but always a sensitive facility that indicates both an appreciation of the characteristics of the subject and a mastery of the pencil.

PENCIL POINTS

VOL. VI, No. 10

PLATE XXXVIII



PENCIL DRAWING BY ERNEST D. ROTH
FONDAMENTO RIELO, VENICE.

A delightful interpretation of a bit of Venice is seen on the other side of this sheet where one of Ernest D. Roth's pencil drawings is reproduced. Throughout the drawing the various portions of the architecture have been rendered in such a way as to give them the quality of ornament, for instance the tiled roofs. The boats in the foreground have been properly subordinated by the slightest kind of indication. The lightness of touch in the pencil work gives this drawing much of its sense of life and gaiety.



Courtesy of H. C. Dickens

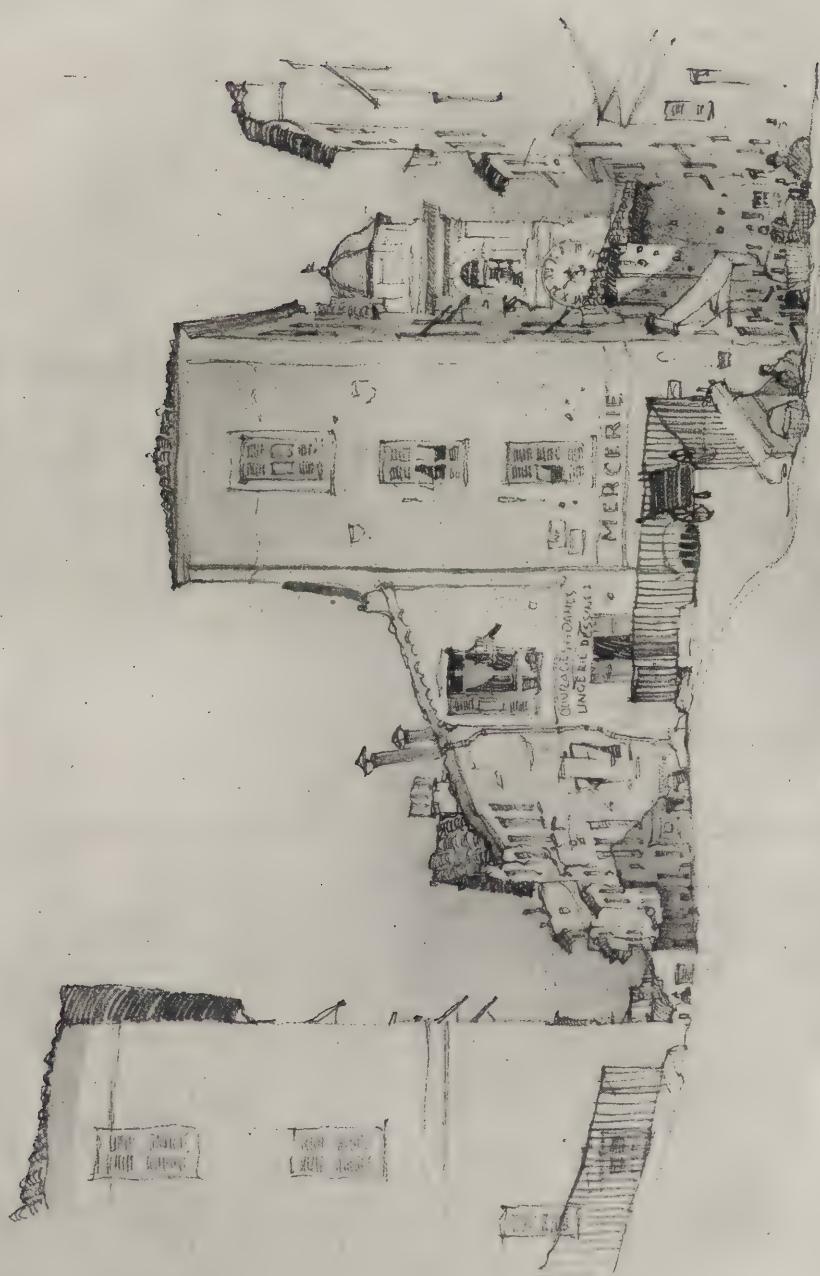
ETCHING BY LOUIS C. ROSENBERG
ARAB COFFEE HOUSE, TANGERS.

The strong sunlight and deep shadows of North Africa, with the illumination provided by strong reflected light, have given Louis C. Rosenberg a problem in the rendering of tones that he has handled well in the etching, "Arab Coffee House," reproduced on the other side of this page. The characterization in the figures is excellent and the sense of life and verity as well.

PENCIL POINTS

VOL. VI, No. 10

PLATE XL



DRAWING BY SAMUEL V. CHAMBERLAIN
VILLEFRANCHE-SUR-MER.

A drawing by Samuel V. Chamberlain that indicates a further development of this artist's excellent technique is reproduced on the other side of this page. Not only is the indication in line good, but the suggestion of tone values is well managed. This sketch is one of many made by Mr. Chamberlain during an European trip from which he has recently returned.

ARCHITECTURE AND THE CONTOUR OF THE BUILDING SITE

A N AID which the architect might well more often insist upon having before he begins the study of the problem of designing a country house, or a group of institutional buildings, is a contour map of the plot of ground upon which the building is to be placed. Without a contour map the proper placing of the building is more or less a matter of guess work, an element that often causes much serious trouble, involving both unsatisfactory results and unnecessary expense to the client.

A contour map must be made ultimately if the landscape treatment of the grounds is to be carried out with any degree of success and it is much better to have it made at the outset.

Innumerable cases might be cited where the house has been so placed on the grounds that satisfactory landscape work has been impossible and the house has never appeared to the full advantage. There are many other cases in which the contour of the ground has been properly studied before the location of the house has been decided upon and excellent results have been obtained. For example, there is an estate on Long Island where the ground is level in the main but slopes gradually at one point and has a shallow valley running obliquely down the slope. In this case the architects studied the ground before designing the house and made it fit the site. Since the approach was to be across a level expanse—the house is large and necessarily tall as well as long—it was evident that it would tie in best with its surroundings if it were set just beyond the edge of the slope so that its apparent height would be reduced. This gives a sloping garden below the terrace on the garden front. It was also evident that by placing the dining-room wing at such an angle to the main building that its axis would coincide with that of the oblique valley a view down the valley could be commanded by the windows in the end of the dining-room. This placing was adopted and the valley was treated as a garden. The effect is admirable.

There are many cases in which the placing of the house a little farther in one direction or another would have produced a much better effect than that resulting from the haphazard procedure followed. When the house is badly placed expedients are adopted, such as the special arrangements of terraces that are intended to cure the trouble, but seldom do. Very often one of the bad features is an unduly high retaining wall for the terrace on the garden front, expensive and very often not particularly sightly. Then, too, when the contour of the ground is not carefully studied in advance of placing the house there are likely to be very unpleasant surprises when the road by which the house is to be approached is laid out. It often happens that in order to construct a road to approach the house in the way the architect intended involves fills and cuts that are unnecessarily expensive and usually ugly.

It often also involves the destruction of trees that should be preserved and that might have been saved as ornaments to the property if their location had been carefully indicated upon a map studied at the time the house was being planned and placed. When a house is a misfit on the land it occupies much of its potential beauty and effectiveness is lost. Also, as has been pointed out casually above, the contour of the ground often inspires the architect with an idea that gives distinction and individuality to the plan of the house and adds to the enjoyment of the owner and his family.

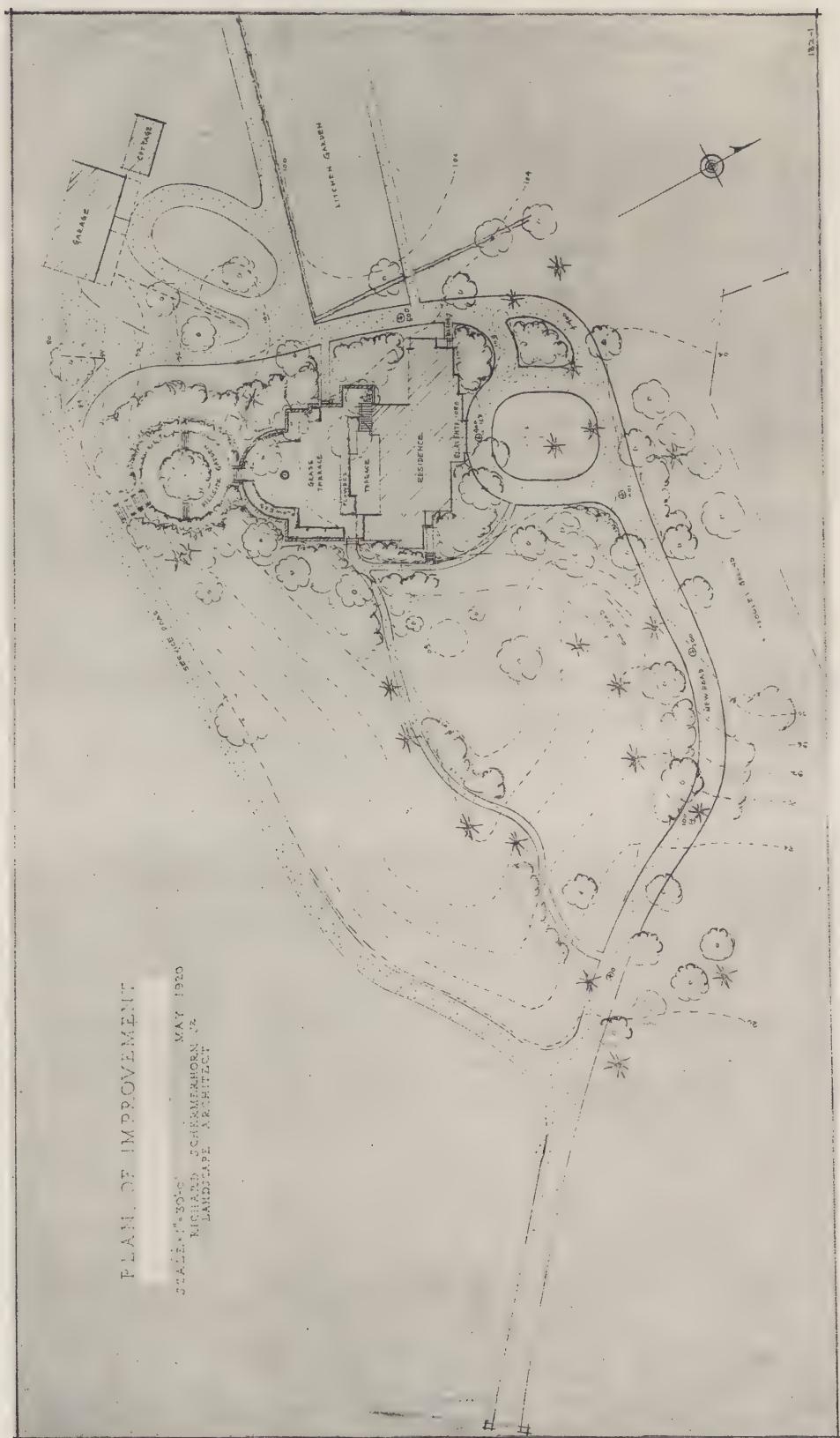
Carefully planned views are appreciated by the owner.

When the contour of the ground is not thoroughly studied before the house is built there is almost a certainty that the earth removed during excavation will have to be moved twice when once might have been sufficient, for unless the earth from the excavation can be placed in the first instance where it is needed, it must be handled at considerably extra expense in constructing terraces and doing grading.

Of course, if the contour map is regarded as something belonging particularly and exclusively to the landscape architect's province, and the landscape architect is not called into conference with the architect at the very beginning, there is sure to be a lack of harmony between the work of the architect and the landscape architect which it is difficult to overcome. But there is no need to regard the contour map as exclusively an instrument of service for the landscape architect or to defer the choice of a landscape architect. These two should co-operate from the very beginning and the architect should more often take an interest in the contour map of the property upon which he is to build.

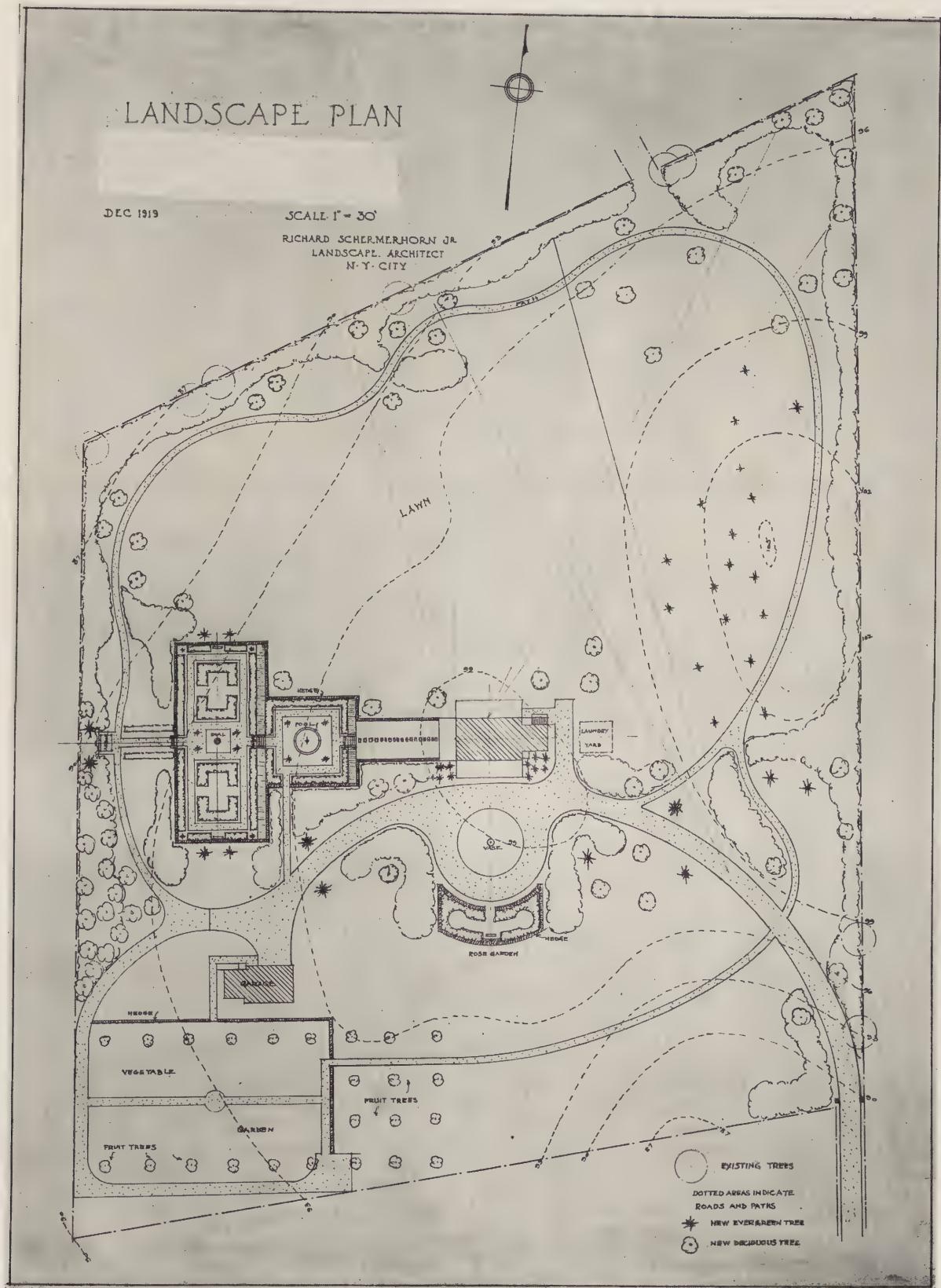
The simpler the indication can be made upon the contour map the better. The practice generally taught of indicating both the old and the new grades of the contour map, distinguishing the old grades from the new by the character of the lines, is considered unsatisfactory by some landscape architects and there seem to be sound reasons for this view. The use of the two sets of lines on one map may easily confuse the contractor and at the same time it complicates the drawing. The practice of indicating the old grades on one contour map and showing the new grades on another has much to recommend it. Often the landscape architect's map shows only the old grades and the proposed gardens, roads and planting, leaving the definite information as to the new grades to be given on a supplementary map if at all. Sometimes the new grades are simply marked in figures enclosed in circles, while the old grades are indicated by lines of the contour. At other times the new grades are shown on squares drawn in pencil and figured in pencil, the old contours being indicated in ink. This is a very good method.

The main point that enforces itself upon one
(Continued on page 83)



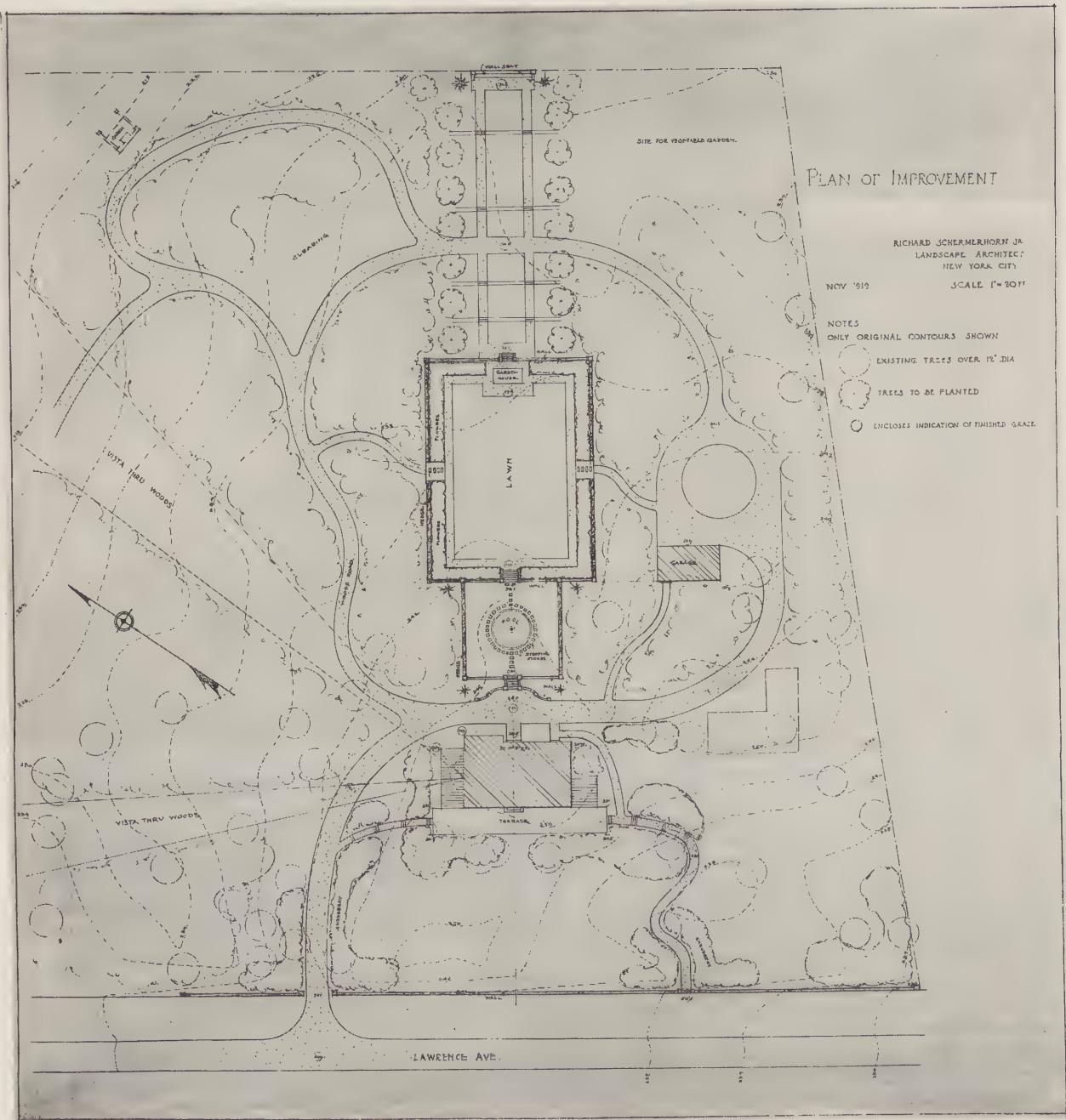
Plan of Improvement for Country Estate, Richard Shermerhorn, Jr., Landscape Architect.

PENCIL POINTS



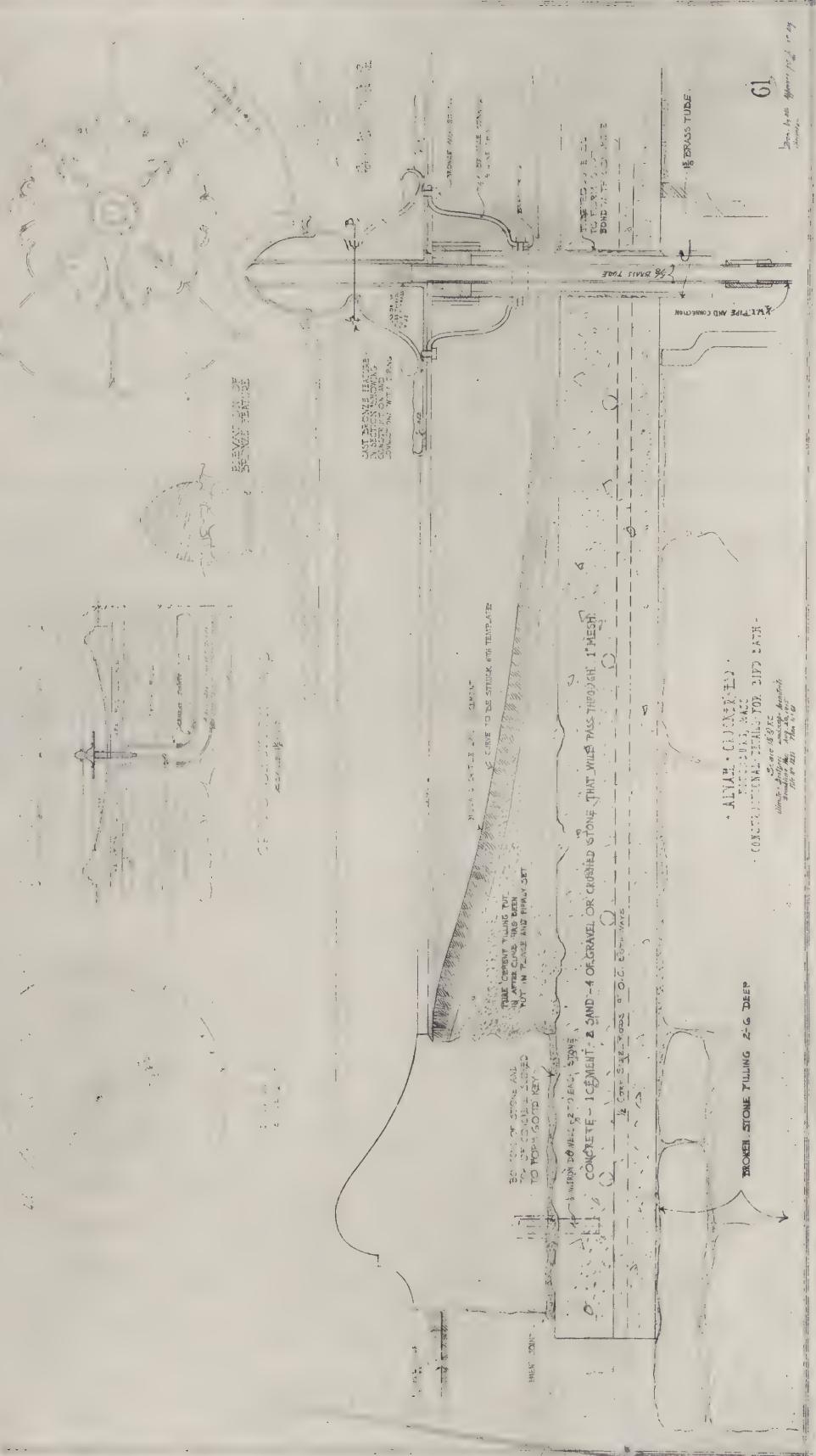
Landscape Plan for Country Estate, Richard Schermerhorn, Jr., Landscape Architect.

PENCIL POINTS

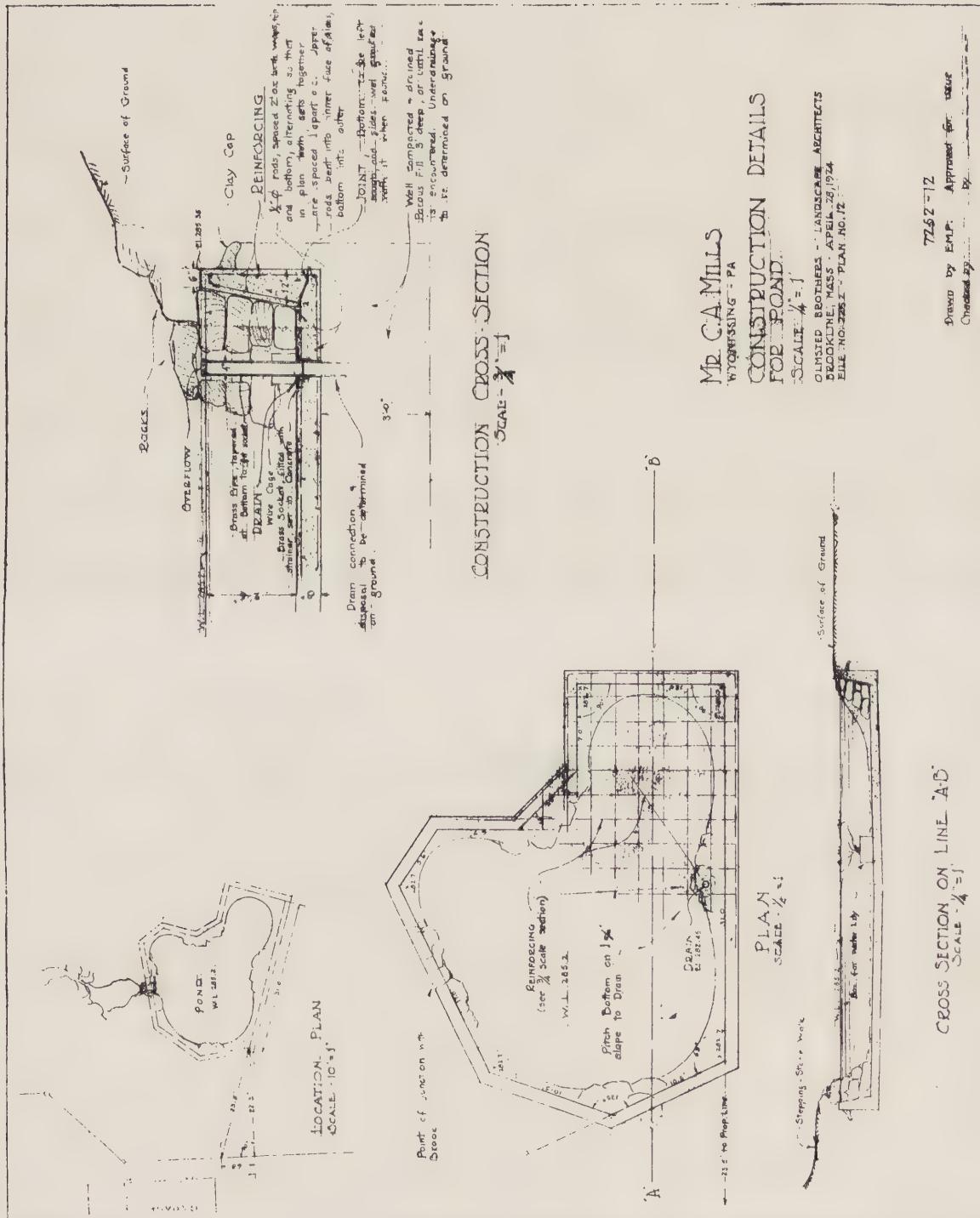


Plan of Improvement for Country Estate, Richard Schermerhorn, Jr., Landscape Architect.

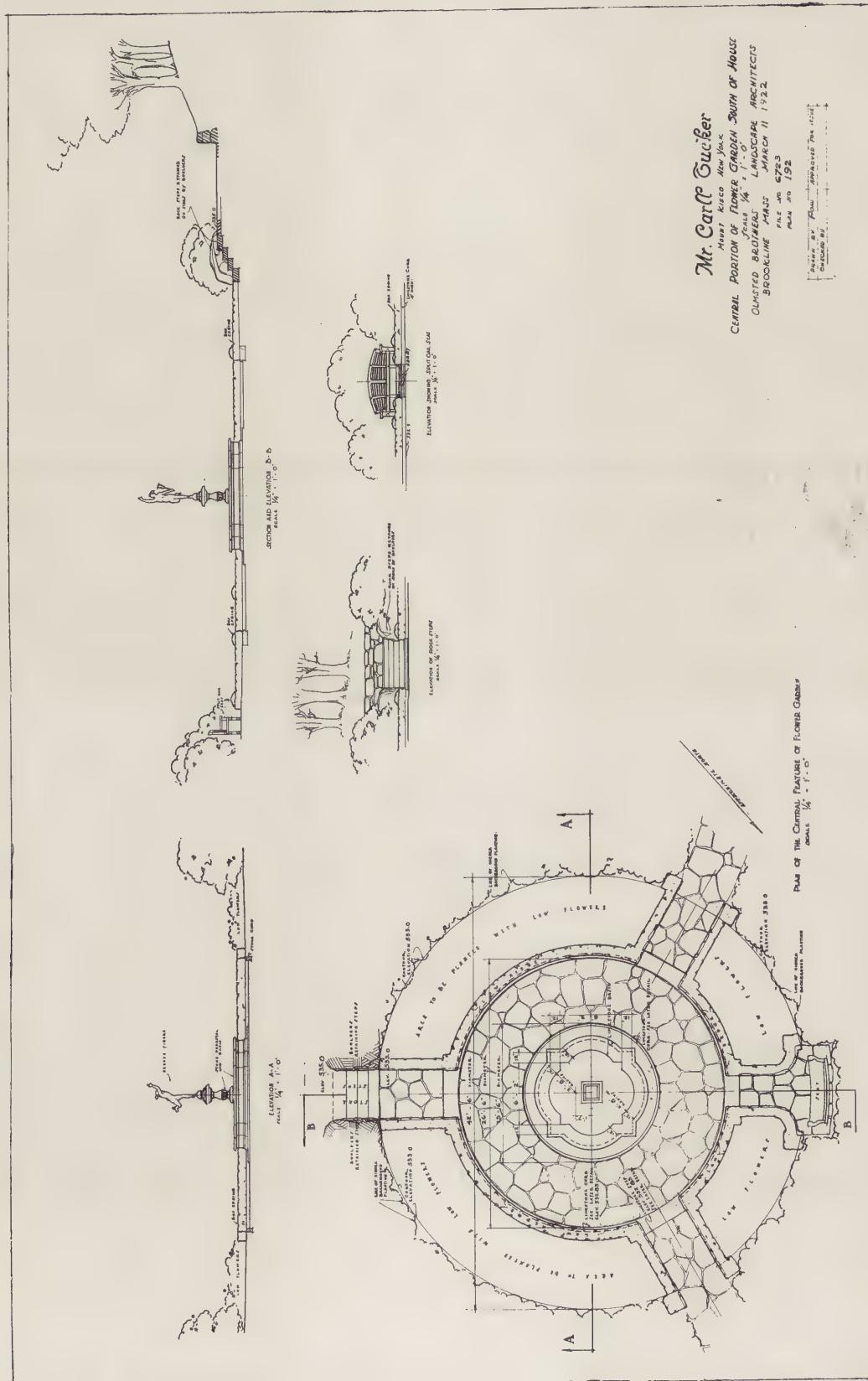
PLAN OF FEATURE
TAKEN ON LINE A-B



Details of Construction—Bird Bath for Mr. Alvah Crocker, Fitchburg, Mass. Olmsted Bros., Landscape Architects, Brookline, Mass.



*Details of Construction—Pond for Mr. C. A. Mills, Wyoming, Pa
Olmsted Bros., Landscape Architects, Brookline, Mass.*



*Details of Construction—Central Portion of Flower Garden South of House of Mr. Carl Tucker, Mt. Kisco, N. Y.
 Olmsted Bros., Landscape Architects, Brookline, Mass.*

PENCIL POINTS



Sketch by Clifford Ulp.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME.

FROM a letter recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following:

"One more registration is to be recorded, this time in the School of Classical Studies: a newly-appointed Fellow of the School at Athens is to be with us until October first.

"Mr. W. Symmes Richardson, one of the junior members of the firm of McKim, Mead & White, feels greatly honored with his appointment for next year as Annual Professor in the School of Fine Arts.

"Composer Elwell has just finished a delightful Ballet, full of variety and interest, and he starts in a few days for Northern Italy and the musical festival at Venice.

"Professor Showerman reports a registration of 54 in the Summer School. He is greatly pleased with the earnestness and enthusiasm of every one of them.

"Professor Frank has been hard at work reading the proofs of Professor Curtis' book on the Jewelry of Sardis, and looking over the material for our various forthcoming publications. He is now taking a two weeks' vacation in the Dolomites.

"Mrs. G. L. Hendrickson, of the Garden Clubs of America, writes that her clubs are to subscribe for three years to the Fellowship in Landscape Architecture.

"Dr. Paul Cret, the architectural advisor of the American Battle Monuments Commission, has been in Rome and examined the various possibilities for a monument not only to commemorate the 70 odd American soldiers and sailors who died in Italy during the great war, but also to record in suitable form the many Italian citizens who fought in the American armies in France.

"A famous Italian archaeologist has died, namely, Senator Giacomo Boni, the excavator of the Roman Forum and the Palatine. The present law, which requires all burials to be made outside the city walls, was put aside, and Boni now lies at rest on the Palatine itself, which he loved so dearly."

THE NEW YORK ARCHITECTURAL CLUB, INC. THE ARCHITECTURAL BOWLING LEAGUE SECTION

THE Architectural Bowling League of New York opens its nineteenth year on October 1st, with ten of its twenty teams getting under way simultaneously on Joseph Thum's famous White Elephant Alleys. The League has contracted for the use of the entire fourth floor, consisting of eleven alleys in this renowned recreational establishment, for every Thursday evening, to continue for approximately thirty-six weeks.

To judge from the enthusiasm of the players, it would

seem that every man is inspired by the hovering rumble of phantom thunder created by past stars in this ancient sport, and occasionally cocking a belligerent eye at the shining records hung up by the past masters, advance determinedly to the foul line, to smash all records to smithereens, or,—try again some other time. Be that as it may, the main attraction for the men in these tournaments is the opportunity they afford to meet each other on the common ground of good fellowship and friendly rivalry. As such it is a huge success, which is amply proven by the expressions of good natured badgering, encouragement, and sympathy (?) when "robbed", that are heard all over the alleys while the games are in progress. Besides, no man would stoop so low as to roll up a 300 score. That would be a gross affront to the rank and file of the League. But should such a sad calamity befall a player, without a doubt he would confine himself to 98 scores for the balance of the season, in justified self-imposed punishment. Yes he would,—.

The following offices have teams in this season's tournaments:

Cass Gilbert
Donn Barber
Alfred C. Bossom
McKenzie, Voorhees & Gmelin
Warren & Wetmore
McKim, Mead & White
W. L. Stoddart
James Gamble Rogers
Schultz & Weaver
Shape, Bready & Peterkin
Schwartz & Gross
Guilbert & Betelle
Benjamin Wistar Morris
Starrett & Van Vleck
Peabody, Wilson & Brown
Holmes & Winslow
Thomas W. Lamb
J. E. R. Carpenter
Andrew J. Thomas
Allen & De Young

We regret that several of last year's teams were compelled to drop out for various reasons, but they remain our friends nevertheless, and hope that next year they will again appear in the line up.

Although a number of applications was received from offices that desired to enter the Architectural Bowling League, the executive committee found it to be impracticable to handle a schedule of more than twenty teams this season.

Henry Sasch, Secretary

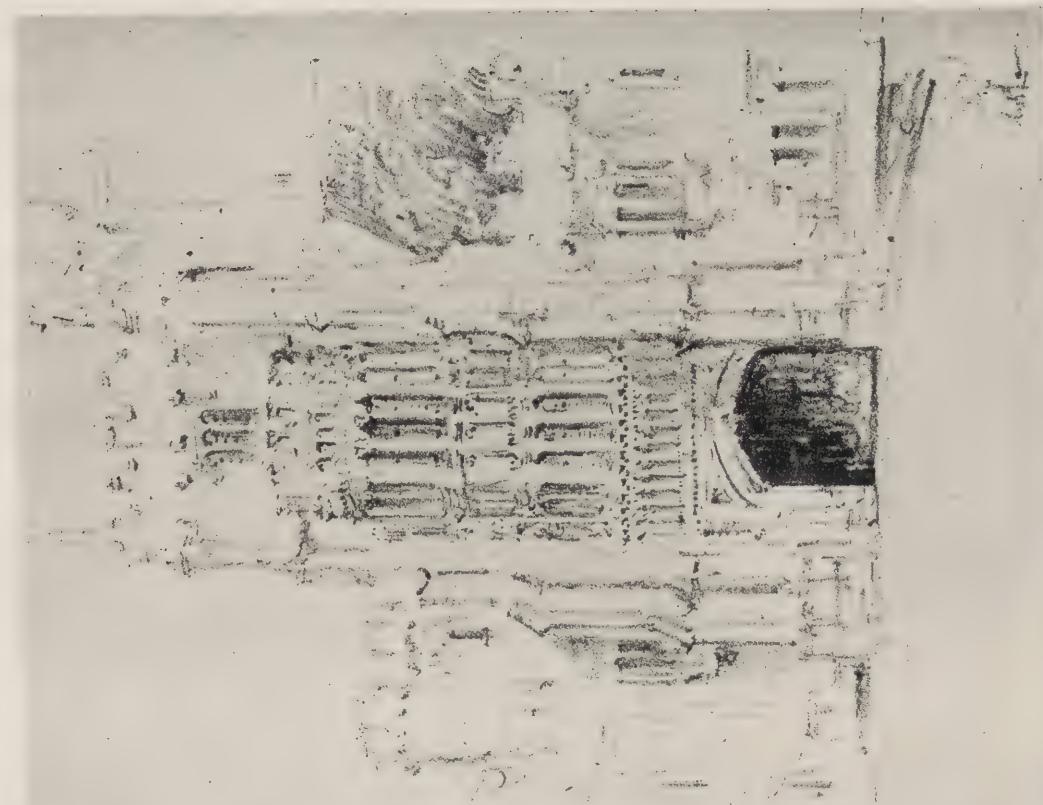
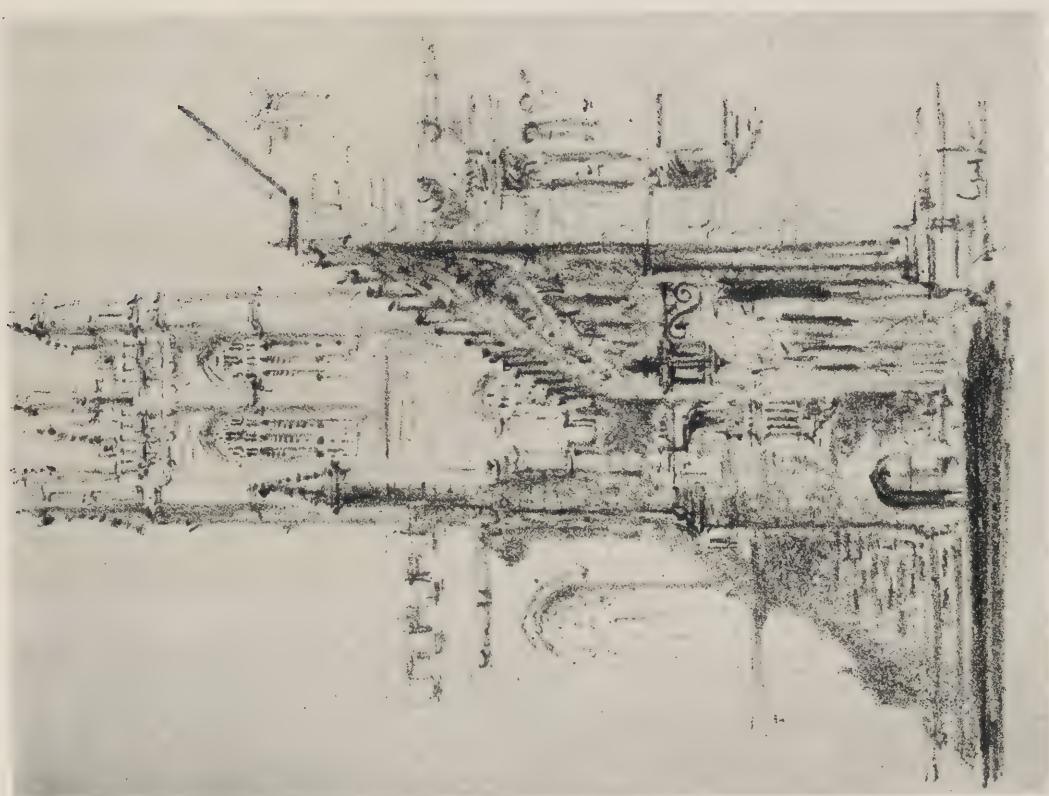
COMPETITION FOR AUSTRALIAN WAR MEMORIAL

THE Commonwealth of Australia is inviting competitive designs for the Australian War Memorial at Canberra. "The Memorial is intended to take the form of a monumental building comprising a 'Hall of Memory' to those Australians who died as a result of service in the Great War, and courts and galleries suitable for housing the war relics forming the Australian War Memorial collection, part of which is now displayed at the Exhibition Building, Prince Alfred Park, Sydney." The competition is limited to architects who are British subjects resident or domiciled in Australia, or born in Australia and living abroad. The competition closes at 12 noon on Wednesday, March 31st, 1926. Conditions regulating the submission of designs may be obtained upon application from the Secretary, Federal Capital Commission, Canberra, and from the Official Secretary to the Commonwealth of Australia in the United States of America, 44 Whitehall Street, New York.

EMIL GINSBURGER

EMIL GINSBURGER, Architect and Teacher, died at his work on September 19th, 1925, of heart failure, an illness from which he had been suffering for four months. Mr. Ginsburger devoted his life to architecture and taught for many years at the DeWitt Clinton Evening High School. He was a member of the New York Sketch Club and for the past ten years had been in the employ of Schwartz and Gross, Architects. His passing on will be keenly felt by his many friends, pupils and associates.

Entrance to the Cloisters.
Lithographs by W. P. Lawson, Leaside, Ontario, Canada. Magdalen College, Oxford.



PENCIL POINTS

PERSONALS

W. HOLMES CROSBY has taken his brother, RALPH M. CROSBY, into partnership. The firm will be known as Crosby-Crosby with offices at 31-33 Beers Bldg., Oil City, Pa.

HUBERT MARION GARRIOTT and WILLIAM GREGORY RAMMEL have severed connections with the firms of Allen and Garriott, Indianapolis, and Allen, Garriott and Rammel, Logansport, Ind., and will continue to practice under the name of Garriott and Rammel, Architects and Engineers, with new offices at 1151-52 Consolidated Bldg., Indianapolis, and 4 Masonic Bldg., Logansport, Ind.

MUEHLMAN & FARRAR, Architects, have removed their offices to 2231 Park Boulevard, Detroit, Mich.

CROMBIE & STANTON, Architects, have removed their offices to 2231 Park Boulevard, Detroit, Michigan.

LEHMANN & WUEHRMANN, have dissolved partnership. William G. Wuehrmann will continue to practice at 505 Two Republics Bldg., El Paso, Texas.

JOSEPH P. JOGERST and ALFRED J. SEELER have formed the firm of Jogerst & Seeler, Architects, with offices at 1916-17 Ford Bldg., Detroit, Mich.

ARTHUR C. SANDERS, Architect, has removed his offices to Paseo de las Flores, Santa Barbara, Cal.

SALVATORE J. GRITTI, Architect, has removed his offices to 1032 South 55th Street, Philadelphia, Pa.

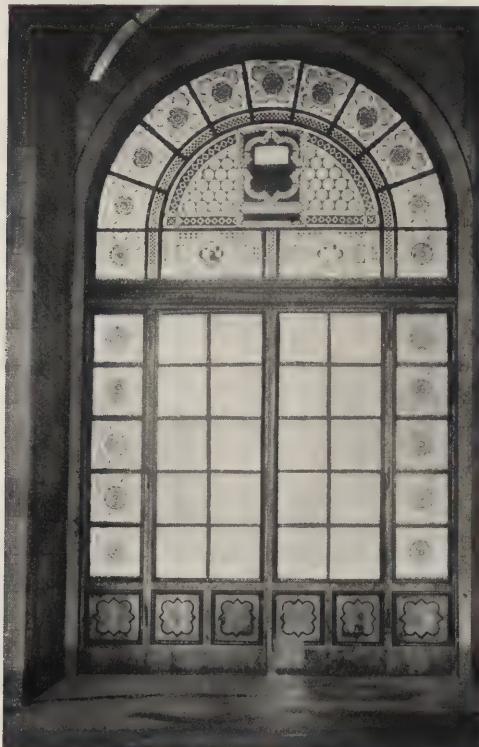
HUGH T. KEYES, Architect, has removed his offices to 635 Free Press Building, Detroit, Mich.

CARL E. SEGERBERG, ARCHITECT, has opened an office for the practice of architecture at 78 Court St., Middletown, Conn.

RAYMOND MILES STOWELL, ARCHITECT, has opened an office at 184 Boylston St., Wauban Bldg., Boston, Mass.

R. KENNON PERRY, ARCHITECT, formerly a member of Robert & Co., Inc., Atlanta, Ga., is now practicing under his own name with offices at 1001 Wynne Claughton Bldg., Atlanta, Ga.

FRED E. SLOANN AND ELMER A. JOHNSON have opened an office under the firm name of Sloan & Johnson for the general practice of architecture at 161 East Erie St., Chicago, Ill.



A Measured Drawing by Herbert Lippmann of this Doorway is Reproduced on Page 91



WENDELL P. LAWSON

WENDELL P. LAWSON was graduated from the University of Toronto, Department of Architecture, in 1924, and was awarded the Province of Ontario Government Scholarship for a year's architectural study abroad. In the summer of 1924, Mr. Lawson worked in the office of Sir Edwin Lutyens in London and the following fall he spent in an atelier of the *Ecole des Beaux Arts* in Paris. The past spring and summer, Mr. Lawson was travelling in France, Italy, Austria, Switzerland and England. On the opposite page are shown two of the many interesting lithographs made during his travels. These sketches were done on a transfer paper with wax crayons and were printed from stone in Paris. The technique is very similar to pencil work and at first glance drawings made in this way are often mistaken for pencil sketches. Mr. Lawson is practicing at Leaside, Ontario, Canada.

AN ANSWER

WE HAVE received the following communication from R. N., 717 Mills Bldg., San Francisco, in answer to the anonymous letter printed on page 91 of the September issue. We shall be glad to hear from other PENCIL POINTERS on this subject.

"In answer to your September number, page 91. The best training for a draftsman to know what is needed to handle a job satisfactorily is to obtain permission from the architect that he may be working for to unofficially take a set of plans and specifications and inspect buildings under construction and keep in touch with all developments of the different segregated contracts. In that way he will learn of things which are never brought into the drafting room, but which are very essential to successfully complete a building. The benefits of such procedure are too numerous to mention here. But it must be made clear to all contractors that his inspection is without authority. Otherwise any statement he may make while on the building may lead to confusion."

ARCHITECTURE AND THE CONTOUR OF THE BUILDING SITE (Continued from page 73)

through experience is that the contour of the site is not a matter that can be left safely to guess work during the designing of the house and taken up only when the question of landscape treatment comes up at some later time.

A number of maps of landscape improvements which show the importance of careful study of the contour of the land are published in connection with this article. In these maps will be found a considerable variety of method of conveying the required information and many interesting conditions are shown. They are well worth studying.

PENCIL POINTS

AN AID TO THE ART OF FREE-HAND LETTERING

By Frank Bentley.

NEAT, regular, and even free-hand lettering either with the pencil or pen is indeed the draftsman's pride, but many of the craft with years' of experience have found it to be a difficult accomplishment.

The perfect letter is not the result of forming it with care in occasional notes or explanations, but the stroking of it even hundreds of times in patient repetition.

A great many practice over the drawing board in hours away from the office, where most of the endeavor takes place, but under circumstances which render the gaining of facility a physical impossibility. Seated before a board no matter how convenient the level or height, the body soon tires and the arm with it. Fingers and eyes fatigue and the time spent is to no avail.

Take a small piece of soft pine, about 12" x 12", and finish on either one or both sides. Tack the guide line paper with the strip of practice cloth or paper to it. The small board can be laid on a table, the arm of a chair, or any other place and in a convenient position to work over it. No matter what posture soon tires the body, a slight shift into another position eases it. A little turn of the small board and practice continues.

Fine lettering is but a matter of delicately trained finger muscles, which soon become very steady, hard and enduring if the body and eyes do not give away first. The small board enables practice to be carried on under a reading glass held by the left hand. The work can be continued pleasantly for periods that develop perfection.

A few months of such practice, taking one particular letter a day for the subject of practice will produce some really wonderful results in removing this stumbling block of the craft.

THE WOMEN WANT AN ATELIER.

AS FAR as we know there is no atelier in New York that admits women. There is a movement under way to start such a place and a number of students and draftswomen are already making plans toward this end. We shall be glad to forward inquiries from anyone who may be interested in an Atelier for Women. Address E. L. C., care of PENCIL POINTS.



Travelling Case which Mr. Richmond had made to carry his Drawing Materials.

ROTCHE SCHOLAR RETURNS

ISIDOR RICHMOND, Rotch travelling Scholar for 1923, has just returned from his travels in Europe. He came in to see us and we were very much interested in a travelling case which he had made for his drawing materials. We reproduce a photograph of it above and also a list of the materials which Mr. Richmond carried in it:

Flap in Cover:

Folder for completed sketches
Note book for measurements
2 water color blocks
2 pencil sketch books

Upper part of tray:

Folding sketching stool

Lower part of tray:

Compartments for the following:

Water-color box

Pencils, pens, rubbing wax, erasers, etc.

Drawing instruments

Water-color brushes

Tin flask for water

Steel tape

Scale and rule

On the opposite page is one of Mr. Richmond's sketches made during his travels in England, France, Switzerland, Italy, Sicily, Algeria, Morocco, and Spain. Mr. Richmond is opening an office at 248 Boylston Street, Boston, where he will practice architecture.

ROOSEVELT MEMORIAL COMPETITION.

THE competition to select a designer for the Roosevelt Memorial to be erected in Washington, D. C., south of the White House, closed October 1st. The prize of the competition is the Commission to Design the monument and the winner will be expected to make any further studies necessary to meet the requirements of the Roosevelt Memorial Association. The designs submitted will be hung in the Corcoran Art Gallery in Washington and will be judged on October 3rd and 4th by the jury, namely, Messrs. Paul Cret, Herbert Adams and Louis Ayres. Each competitor will receive an honorarium of \$2,000. Announcement of the award will be made in the November issue.

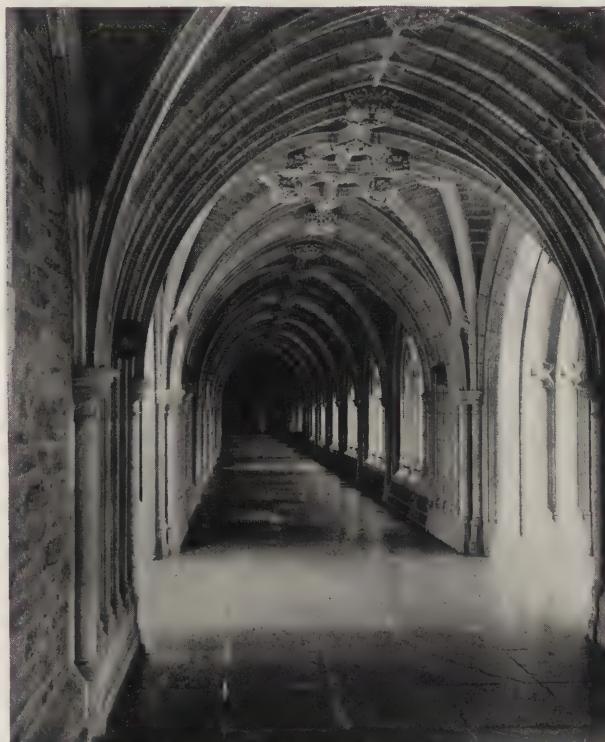


Photo showing Cloister Vaulting; Princeton University. Day & Klauder, Architects. Plan and Details of this Vaulting appear on page 88.

PENCIL POINTS



ERNEST D. ROTH

ERNEST D. ROTH has recently returned from Italy and brought with him a number of very interesting drawings. He was born in Stuttgart but came to this country when he was five years of age and was brought up and educated in New York. He studied art at the schools of the National Academy of Design and etching under Mr. James D. Smillie. For a number of years Mr. Roth has practiced and studied in Italy and Spain, visiting France, Germany, Austria and Turkey. Mr. Roth is perhaps best known for his etchings which have a clarity and beauty that cannot be over-praised. His pencil sketches are equally delightful and through the courtesy of Mr. Roth we have reproduced one of these on page 67 of this issue.

JACOBSON ANNUAL COMPETITION FOR 1926.

JACOBSON & COMPANY are offering prizes amounting to \$1,000 for a "Design for an Architectural Club." The competition is open to architects, draftsmen, students and others. Prizes to be awarded as follows:

1st Prize	\$500
2nd Prize	\$300
3rd Prize	\$200

The competition closes April 1st, 1926. A full announcement appears elsewhere in this issue, or information may be obtained from Jacobson & Company, 241 East 44th Street, New York.

LEHIGH PORTLAND CEMENT HOME COMPETITION

THE Lehigh Portland Cement Company is holding a competition for the architectural design of moderate-cost fire-safe, concrete masonry houses and bungalows. Prizes to be awarded as follows:

Grand Prize	\$1,000
First Prize, Class A.....	\$500
Second Prize, Class.....	\$300
Third Prize, Class A.....	\$200
Fourth Prize, Class A.....	\$100
10 Mentions, Class A (each).....	\$50
10 Mentions, Class B (each)	\$50

The competition closes at noon, November 10, 1925. An announcement of the competition is published elsewhere in this issue or may be secured from *The Architectural Forum*, care Lehigh Portland Cement Home Competition, 383 Madison Avenue, New York.

COMPETITION FOR WALLPAPER DESIGN.

A COMPETITION open to all architects, artists, decorators, designers and students resident in the United States is being conducted by The Arts-in-Trades Club of New York. Designs are requested for a wallpaper to be used in the living room of a moderately-sized, detached, suburban dwelling with a medium natural light exposure. Through the courtesy of Mr. Robert Griffin, who has placed a generous sum at the disposal of the Club for this purpose, prizes will be awarded as follows:

First Prize	\$1,000
First Honorable Mention	\$200
Second Honorable Mention	\$100

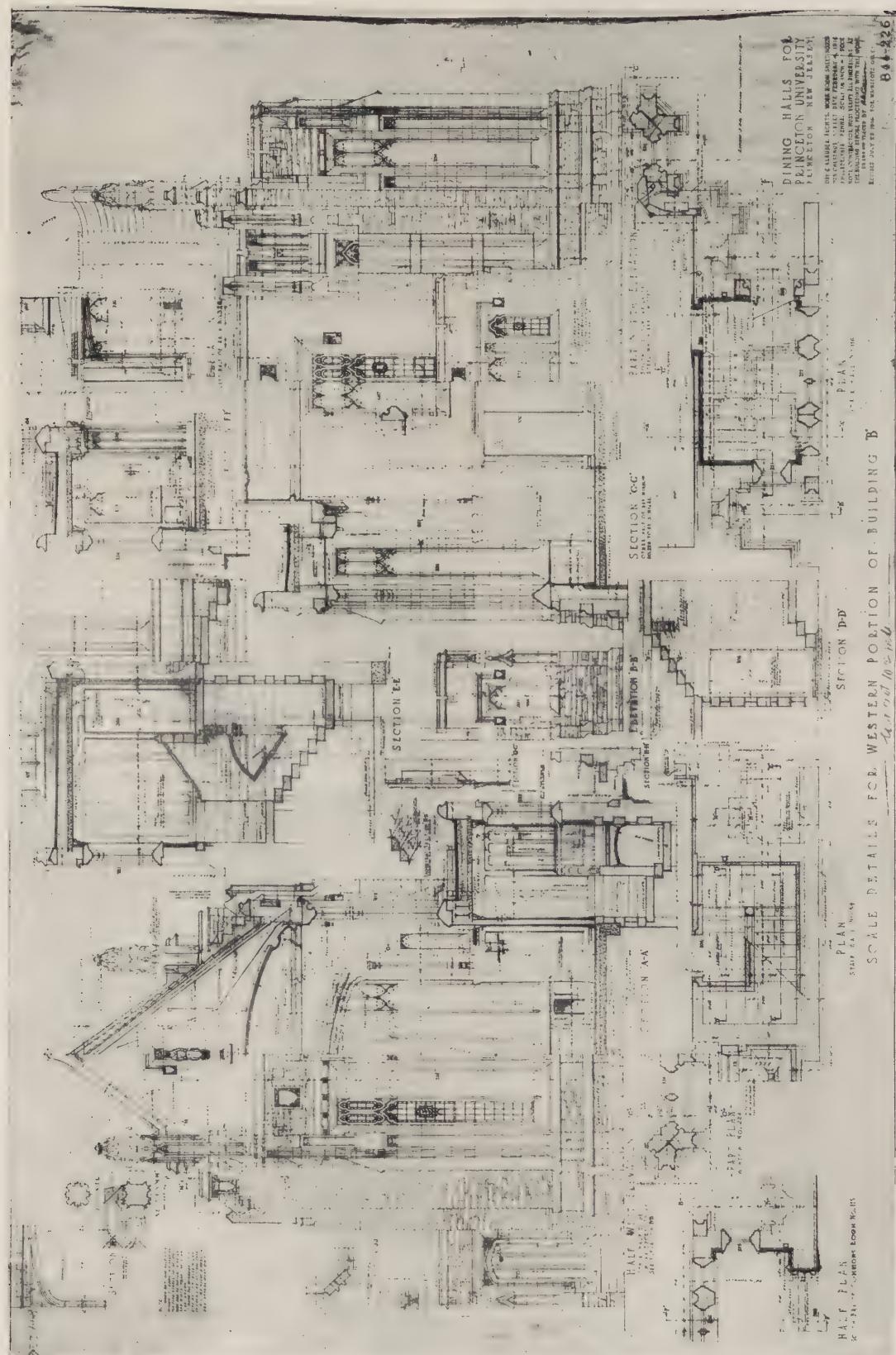
Designs to be submitted in the competition should be sent to George E. Clark, Secretary of the Exhibition Committee, Art-in-Trades Club, 34 East 38th Street, New York, between February 15th and February 20th, 1926. A public exhibition of the designs will be held at the Club from March 1st to March 20th, 1926.

AMERICAN HOSPITAL ASSOCIATION MEETING

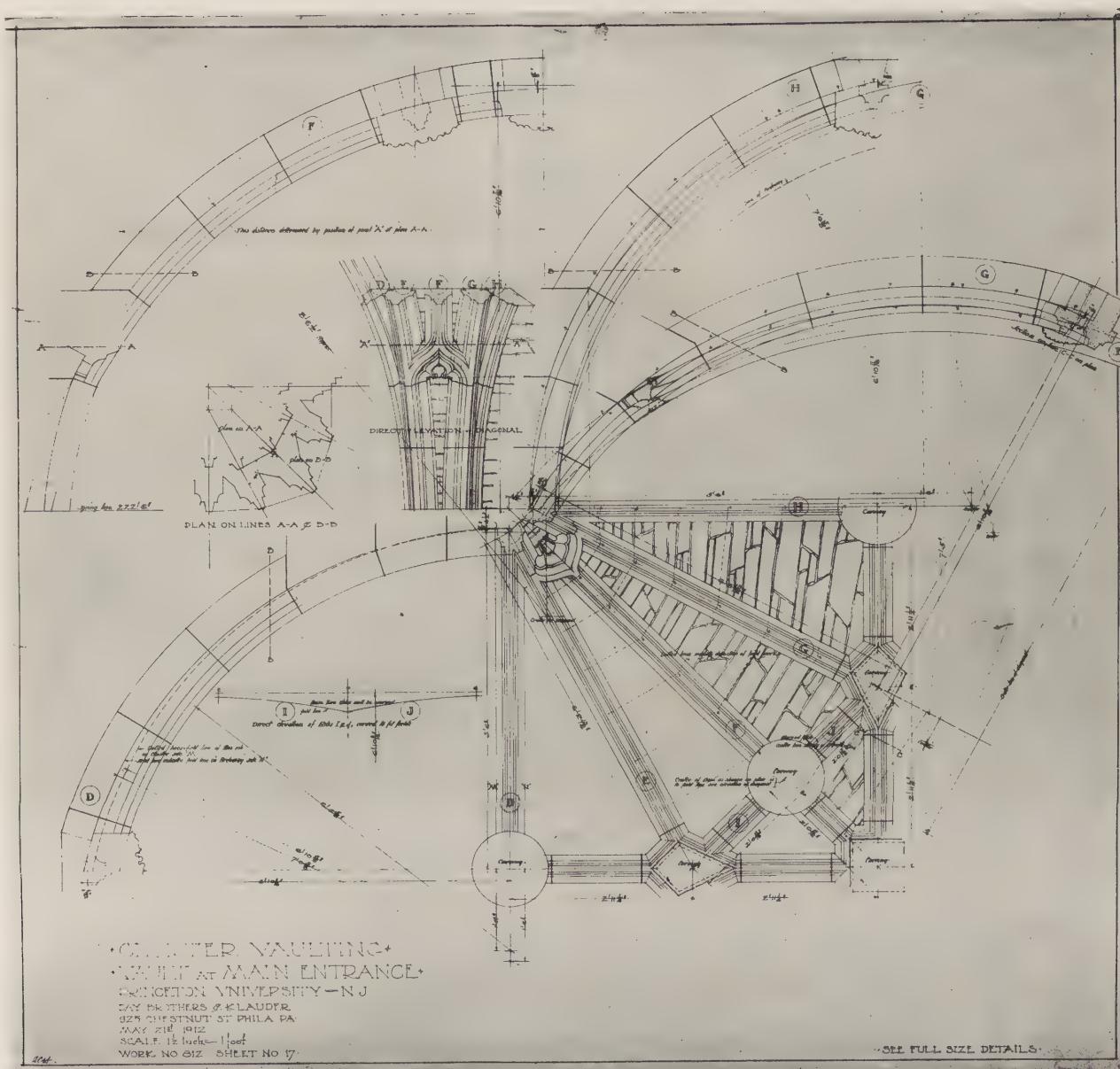
THE meeting of the American Hospital Association will be held in Louisville, October 19th to 23rd. The Hospital Library and Service Bureau will show plans of approximately eight hundred hospitals, sanatoriums, nurses' homes, medical schools and allied institutions. Another feature will be a sample of the way in which the Bureau has indexed the hospital journals—*The Modern Hospital*, *Hospital Management* and *Hospital Progress*. The office of the Hospital Library and Service Bureau is at 22 East Ontario St., Chicago, Ill., Donelda R. Hamlin is Director.



Drawing made in Rome by Isidor Richmond.

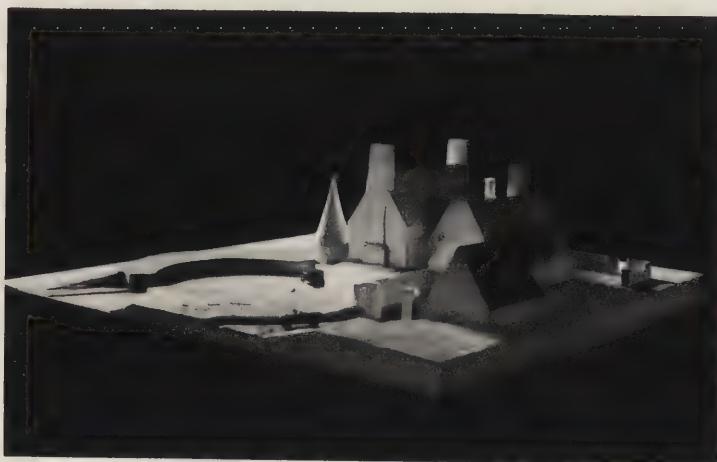
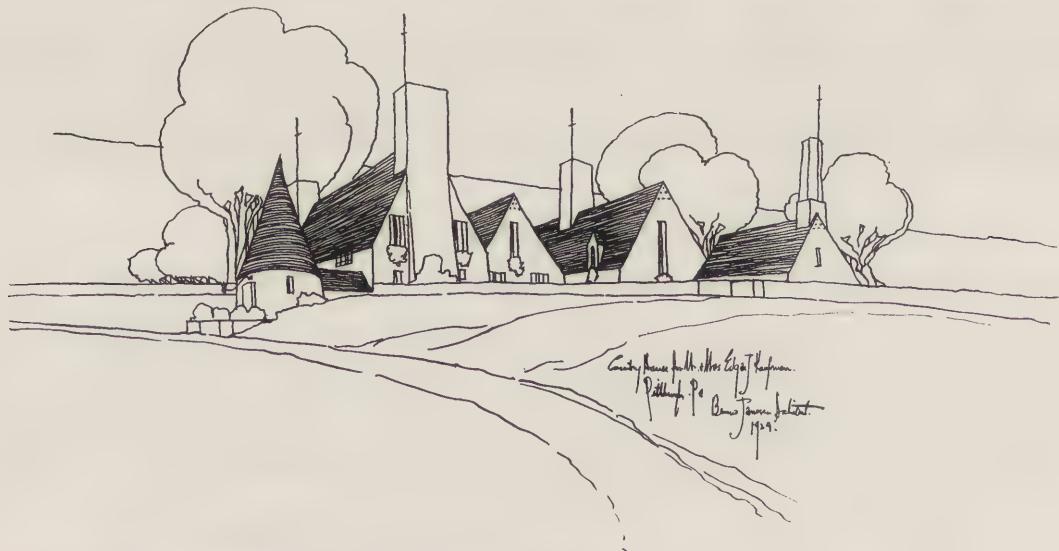


Details of Construction—Dining Halls for Princeton University. Day & Klauder, Architects, Philadelphia, Pa.



Details of Construction—Cloister Vaulting, Vault at Main Entrance, Princeton University. Day & Klauder, Architects, Philadelphia, Pa. (A photograph of the completed cloister appears on page 84.)

PENCIL POINTS



Above—Mr. Janssen's Original Sketch.

Top—Working Drawing Showing Development of Entrance Side Elevation

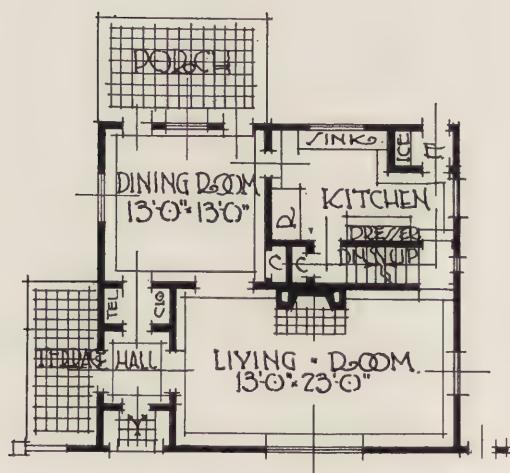
Left—Model for Study of the House.

*Country Residence for Mr. and Mrs. Edgar J. Kaufmann.
Benno Janssen, Architect, Pittsburgh, Pa.*

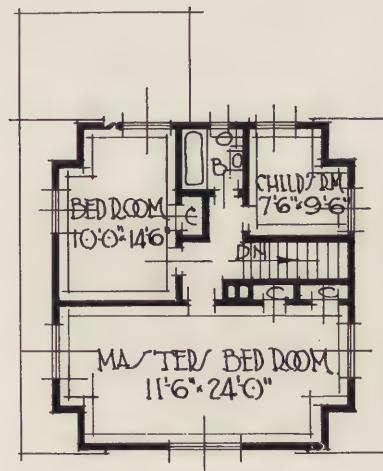
PENCIL POINTS



Rendering by Royal Barry Wills.



First Floor Plan.



Second Floor Plan.

Design for a Small House, Royal Barry Wills, Architect, Boston, Mass.

PENCIL POINTS

WASTE

By Raoul C. Gautier

(Continued from page 64)

building. Whether he knows it or not, and it is assumed that he does not, the owner pays the bill, a bill which is far too large, since he pays for doing the same operation a number of times, instead of paying for it once. It is waste, pure and simple—intolerable waste.

And yet we have at our disposal a method: the quantity survey system—which it is true does not eliminate all the evils of estimating, but which has at any rate the following advantages:

(a) Since it is impossible for the quantity surveyor to make a complete survey of the quantities without having complete plans and specifications, the Architect or Engineer is compelled to make his plans complete and his specifications definite.

(b) The Contractor is not then placed in the embarrassing position of deciding whether the Architect means one thing or its equal, or another, or to assume full responsibility for conditions which the Architect is either too lax or too lazy to investigate thoroughly, such as the nature of the ground, the probability of water in the excavation, the possibility of having to underpin adjacent buildings and a thousand other items which are responsible for a higher price when bids are asked from competent contractors on incomplete or indefinite plans and specifications.

(c) Incompetent and unreliable contractors who do not know how to take off quantities and who leave out of their estimate all that is not absolutely definite, hoping to get by later, and gamblers, are eliminated from the field, thereby making contracting a more desirable business.

(d) The Architect's task is thereby rendered much easier and "extras" due to omissions or errors reduced to a minimum.

(e) The Contractor's mind being absolutely at rest as to "quantities" he can devote all the time granted him for the preparation of the bid to the study of the best and most economical way of handling the job, the obtaining of better prices and finally his own pricing which too often is done in the last minute rush.

(f) This system works successfully in other countries and is used in this country for public and railroad work and there is no reason why it should not be successful in all branches of construction. We believe that trained men could take off and list the quantities on a job such as mentioned above for one-half percent or less with a corresponding saving of at least \$8,000 on such a job as that under consideration. It is an easy thing to figure a proportional saving on \$5,000,000,000; an approximate estimate of the amount spent annually for construction in the entire country. The result, \$100,000,000, is staggering.

It is not proposed that the cost of quantity surveying be borne by the Architect. God knows, his fee is small enough as it is. No, it is part of the cost of the building, just as much as the plans, or the heating for that matter, and it should be borne rightly by the Owner. How to make him pay is a question to be decided by the parties interested, and an Architects' campaign in this direction would undoubtedly help greatly.

At any rate, it seems to the writer that there is no reason why quantities could not be taken off by somebody appointed by the Architect and the surveyor's fee reimbursed to the latter by the successful Contractor. It is suggested that a clause reading as follows might be incorporated in the specifications:

"The Bidders shall allow in their estimate the sum of \$.....to cover the cost of quantity surveying. This sum shall be reimbursed by the successful Contractor to the Architect immediately upon the awarding of the contract."

There is not very much more to be said except perhaps that besides the advantages enumerated above, the adoption of quantity surveying would probably eliminate from the field incompetent members of the architectural profession who, because they prepare incomplete plans and specifications, are able to take commissions for much smaller fees than the more competent and more conscientious architects.

ADDRESSES WANTED

ANYONE knowing the correct addresses of the following will confer a favor by sending them to this office, Pencil Points Press, Inc., 19 East 24th Street, New York City.

ALABAMA: Robert Liary, Auburn.

CALIFORNIA: Olive K. Chadeayne, Berkeley; S. T. Alexander, John Ferrier, Everett R. Harman, Emil A. Lehti, Samuel P. Lipschitz, Henry F. Starbuck, D. P. Thomas, Alonzo Warden, Los Angeles; F. W. Brauer, Mill Village.

COLORADO: H. Z. Sanders, Boulder.

CONNECTICUT: D. W. Brauner, S. Coolidge Haight, S. Lee Hinman, E. Munizaga, W. R. Stone, New Haven.

FLORIDA: H. D. Davis, Arthur J. Pohle, Miami; H. S. Singley, Orlando; Miss Marie Ballet, West Palm Beach; W. C. Caughman, St. Petersburg.

GEORGIA: C. M. McGarvey, J. J. Whitfield, Atlanta.

ILLINOIS: P. B. Byrne, Champaign; Lee Atwood, Lloyd H. Dittrich, J. B. Lindquist, T. Rissman, J. Wm. Sievert, Emil Zunkeller, Chicago; Charles F. Ellis, Oliver Stepan, Urbana.

IOWA: C. H. Perisho, Bloomfield; Eugene F. Gier, Conrad; V. O. French, Des Moines.

KANSAS: John W. W. Thompson, Wichita.

MARYLAND: Howard C. Sullivan, Cottage City.

MASSACHUSETTS: Richard A. Butler, P. DiSalvo, E. E. Dobbins, Boston; A. D. Badour, John Walter Wood, Jr., Cambridge; Harry B. Greene, Worcester.

MICHIGAN: W. G. Chan, Wayne H. Laverty, Miss Margaret Ward, L. M. Wetzel, W. B. Wiener, Ann Arbor; Howard L. Farley, Verne H. Sidman, Arthur Y. Smith, Detroit.

MINNESOTA: C. Odlin, Brookside; Alvin J. Jansma, E. Neagoe, I. W. Silverman, S. C. Wong, Minneapolis.

NEW JERSEY: L. W. Pickering, Newark.

NEW YORK: William C. Hespelt, Albany; T. Schmidt, Brooklyn; Joe McCoy, New Rochelle; Walter H. Babcock, Elmer Babitsky, Martin Beck, Valerio Giorgini, James P. Huguet, Kieswitter & Hamberger, M. McDowell, Edgar D. Tyler, New York City; P. E. O'Brien, Waterloo.

NORTH CAROLINA: R. C. Brown, D. R. Pace, Raleigh.

NORTH DAKOTA: T. Avery Chadwick, Fargo.

OHIO: C. Y. Wong, Canton; Harry McMorris, Cleveland; George H. Birch, K. E. Dumbauld, C. D. Robb, Columbus; Niel Meehan, Dayton; James Lane, Jr., Lakewood.

PENNSYLVANIA: K. W. Foucar, Herman H. Kline, F. F. Schumann, Ellis R. Waring, Philadelphia; George J. Scheers, State College; Doyle S. Eberhart, Uniontown; Edmund Poggi, Wilkes Barre.

SOUTH CAROLINA: Charles L. Guy, Greenville.

TENNESSEE: W. W. Donaldson, Knoxville; Everett D. Woods, Memphis.

TEXAS: Arnett Elliott, Dallas; A. E. Boyer, Harrisburg.

UTAH: Slack W. Winburn, Salt Lake City.

VIRGINIA: W. J. Anderson, Jr., Alexandria; L. D. Bean, John Behrens, B. Franklin Hart, 3rd, Marshall Wells University.

WASHINGTON: Carl McLean, Edwin Turner, Seattle.

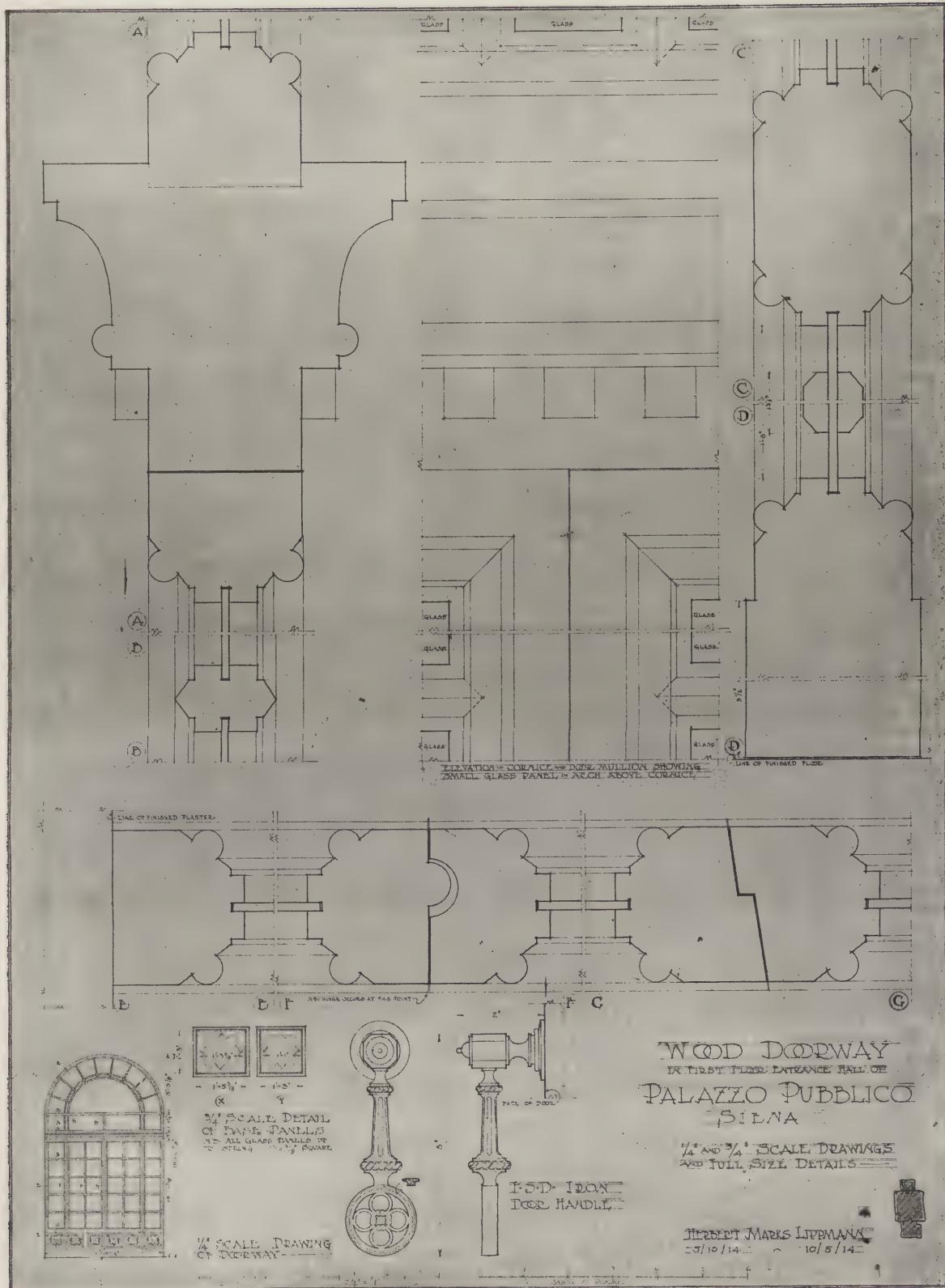
WEST VIRGINIA: J. R. Birchfield, George D. Brown, Huntington; John J. Murray, Wheeling.

WISCONSIN: Ellis J. Potter, Madison; William C. Ostermeyer, Milwaukee.

ATTENTION ARCHITECTURAL CLUBS!

WE WANT the names of officers that have been elected for the coming year in each and every architectural club in the country. We want to know your plans for the coming season, about your parties, ateliers, and anything that will be of interest to PENCIL POINTERS. Material for publication should be in our editorial offices at 19 East 24th Street, New York, on the 10th of the month preceding publication. We shall appreciate it if the secretaries of the various clubs will send in their news now for the November issue.

PENCIL POINTS



Measured Drawing by Herbert Lippmann. (A photograph of this Doorway appears on page 83)

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

THE discoverer and founder of this department went on his vacation a while ago and said he would come back in time for the printer, but he hasn't shown up yet and so we guess he is fishing, or something, and has forgotten all about it so we will have to do the best we can, which will probably be just as good as he would have done anyway.

CONTRIBUTIONS in response to the announcement published here in September are already coming in and the competition for the monthly prizes bids fair to be keen indeed. There is certainly plenty of talent rampant or latent in all parts of the country and here is a good chance for everybody to show what he can do. For the benefit of those who may have overlooked the announcement in question it is reprinted herewith.

We are going to offer prizes according to the following specifications. There will be four monthly prizes of ten dollars each, to be awarded as follows:

Prize No. 1 for the most interesting sketch received each month. No conditions as to subject or medium used. Sketches may be of any size and done in any manner pleasing to the sketcher.

Prize No. 2 will be awarded to the most interesting verse. It may be a couplet, or a triolet; a limerick, an ode, or a dithyramb; it may be blank verse or free verse, or doggerel or anything whatever that has capitals at the beginning of each line. It may deal with architecture or astronomy or anything else.

Prize No. 3 will be awarded to the best cartoon or caricature. No conditions as to subject or treatment. In awarding this prize greater weight will be given to the originality and cleverness of the idea, rather than to the technique or draftsmanship.

Prize No. 4 will be awarded to the most interesting item received each month not falling within any of the above mentioned classifications. It may be an anecdote or a witticism, or anything else which would find proper place in this column, and we are to be the sole judge of what is proper.

This stupendous contest started with the month running from September the fifteenth to October the fifteenth. All contributions received between these dates will be considered for the prizes, whether they are actually selected for publication in the November issue or held for later use.

The same dates will be observed for subsequent judgments; that is, the second series of prizes will be awarded for contributions received between October fifteenth and November fifteenth, and so on until further notice.

All drawings, whether awarded prizes or not, will be promptly returned to the contestants.

Anyone may enter as many items as he wishes for one or more months, whether he be a subscriber for PENCIL POINTS or not; and contributions from foreign countries are quite as welcome as the domestic product.

Mark all contributions with the name of this department and make sure that in all cases the name of the contributor appears both on the wrapper and inside the package.

And here is the first offering to our monthly competition, sent in from Phoenix, Arizona. We don't know whether we should publish this now or not, but we like it—and the boss isn't here to stop us:

R. W. R., Conductor of "Here and There, and This and That."

Beloved:

Here is a shot at the prize for No. 2; being alleged verse of a sort; also a problem story of crime in high life, and offered as

A SONNET ON ARCHITECTURAL PRACTICE Alphabetically Arranged.

A, for an Architect, whose name was B,
And C for a client who came in to see
About D, a design for E-recting a F-lat,
G-rand, H-andsome and I-imposing, and all of that;
J, for Jacobean, the style of the gables
K-aleidoscopically colored to harmony-tables;
Bearing L, the looks, always in M, the mind,
For the good of the N-eighborhood, and things of that kind;
O for orientation, and P for some paint,
Q-uaintly R-eacting on S-inner and saint,
According to T, the technical statistics,
U, for uniform with V-ariable characteristics;
Having W, the windows, set at X, the unknown,
By co-efficient Y, for the new building Z-one.

V. O. WALLINGFORD



Vacation Sketch by Harold W. Barker, Grand Rapids, Michigan.

PENCIL POINTS

HERE is a letter from Pencil Pointer Louis S. Dunbar, on the subject of a competition for an "Ideal" Cellar, which we are passing along to those of our readers who may find themselves face to face with the cellar problem. Mr. Dunbar seems to have met the monster face to face and evolved a solution quite in accordance with present day necessities:

In the August 1925 issue I noticed an item regarding a competition for an "ideal" cellar layout.

I have recently completed for a client (and to the complete satisfaction of both the man and his wife) a small house, the contract price of which was \$37,025.05. The cellar of that house received so much thought and study, and is really so perfect in every detail that in the community it is unanimously regarded as the "ideal" cellar.

Without wishing to appear unduly modest, I venture to state that were I to send in that plan, it would be useless for others to submit their designs. The competition would close them and there.

In the first place, the owners insisted the furnace be located on the first floor, and an oil burner. The man could not be annoyed with the necessity of going down cellar day after day, eight months of the year, merely to stoke up a furnace; to say nothing of the nuisance of clearing out the ashes. As he is door-man in a popular supper club in the City, and would therefore be absent all night, his wife would have had to coal up each evening; and she positively refuses to go down cellar alone after dark. They both had seen glowing pictures in many magazines showing a chic article located in rooms of every description, from billiard room to boudoir, and the nickel-plated trimmings and immaculate floors in the illustrations had captivated them. After much study and with great astuteness, I worked in a cozy niche off the living room, balancing on the plan the radio alcove, and in it installed a shiny, most attractive little boiler, with oil-burning attachment. It is a pleasure now to enter that room and observe the thermal center of the household in its personal intimate setting.

They tell me that guests, after inspecting the cellar, come up-stairs and often go to the furnace thinking it is an elaborate radio set and try to get distance on the steam gauge.

In many homes the laundry is located in the cellar. I eliminated this room. My client's wife each week takes the family wash in a taxi, around the corner to a popular "WET WASH" atelier.

The cold room, which formerly was a prime requisite in every house, was very easily dispensed with. Each day the wife gets all the necessary supplies at the delicatessen on the main street, next door to the beauty parlor.

Thus was the cellar rid of all the usual fussy, awkward, and disagreeable features, and the space left entirely clear—an IDEAL cellar where my client can make all his home-brews.

Very truly yours,
(Signed) LOUIS S. DUNBAR

WE HAVE received a letter from Guylor Robert Miller, of Honolulu, Hawaii, which we believe will be of interest to readers of PENCIL POINTS. On page 9 of this issue will be found one of the designs for a small house described by Mr. Miller in his letter.

The Editor,
PENCIL POINTS,
Dear Sir:

Accompanied herewith find sketch of a house which I thought you might find of use for publication in your little journal being, as it were, from the other side of the world. Perhaps a word in explanation would not be amiss.

The first thing that prospective clients ask for is a book that might give them some ideas on the type of a house that they desire. Of course, with apprehension that can be well understood, one doles out the usual stock plan books with the usual apologies aenent their unadaptability, their erroneous appended cost and (Vanitas Vanitatum) their utter atrociousness. Also, altho this point is not mentioned, the fact that these plans are furnished, prepared by certified architects, (please do not comment) for the munificent sum of twenty-five dollars. In order to get away from all this I prepare sketches under local conditions and prices similar to that here sent. This work I do in my spare moments and to date I have about fifty of these designs. Now when the feller with the lot and the girl enters the office he gives

these sketches the double "O" and usually finds exactly what he, pardon me, the missis, wants.

Moreover the renignant part, that of handing out another's work for ideas, is successfully obviated.

Yours very truly,
(Signed) G. R. MILLER



We are advertised by our loving friends. Ernest Olaf, of Kansas City, encloses the above masterpiece with his order for a copy of the missing book.

Every ambitious draftsman, as well as every practising architect, should read THE ARCHITECT'S LAW MANUAL. This book, by Clinton S. Blake, Jr., is published by the Pencil Points Press, Inc. Price is \$5.00.—ADV.

The prize for the most interesting contribution in this department for September goes, by unanimous vote, to Mr. Miles Miller, Dayton, Ohio, for his cartoon entitled "Our Office."

Mr. John J. Wade, 15 Crescent Avenue, Buffalo, N. Y., is anxious to secure copies of PENCIL POINTS for December 1924, January, February and March 1925. Mr. Wade will be glad to hear from those having copies to spare.

We do not know what the old man will say when he gets back about the way we have done his work for him, but he has nobody to blame but himself. The next time he goes on his vacation he ought to do his work before he leaves and not leave us high and dry on the sixteenth of the month, same as he did this time. We had to do our work, vacation or no vacation.

PENCIL POINTS



Sketch by André Nendtvich, Old Street in Pecs, Hungary.

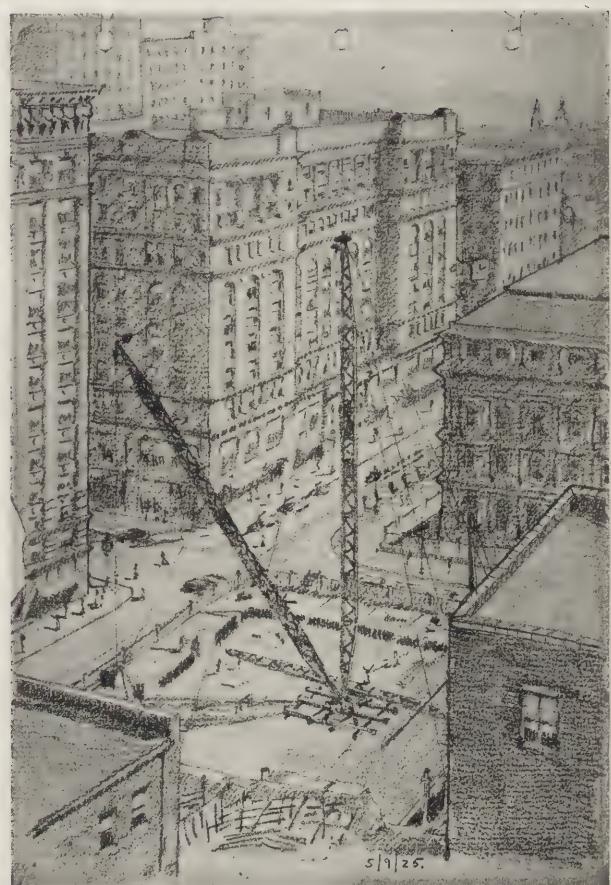


Sketch by André Nendtvich, Market Place in Pecs, Hungary.

PENCIL POINTS



Sketch by F. Thorp, New York.
Imperial Institute, London.



Sketch by Alex. C. Krueger, St. Louis, Mo.

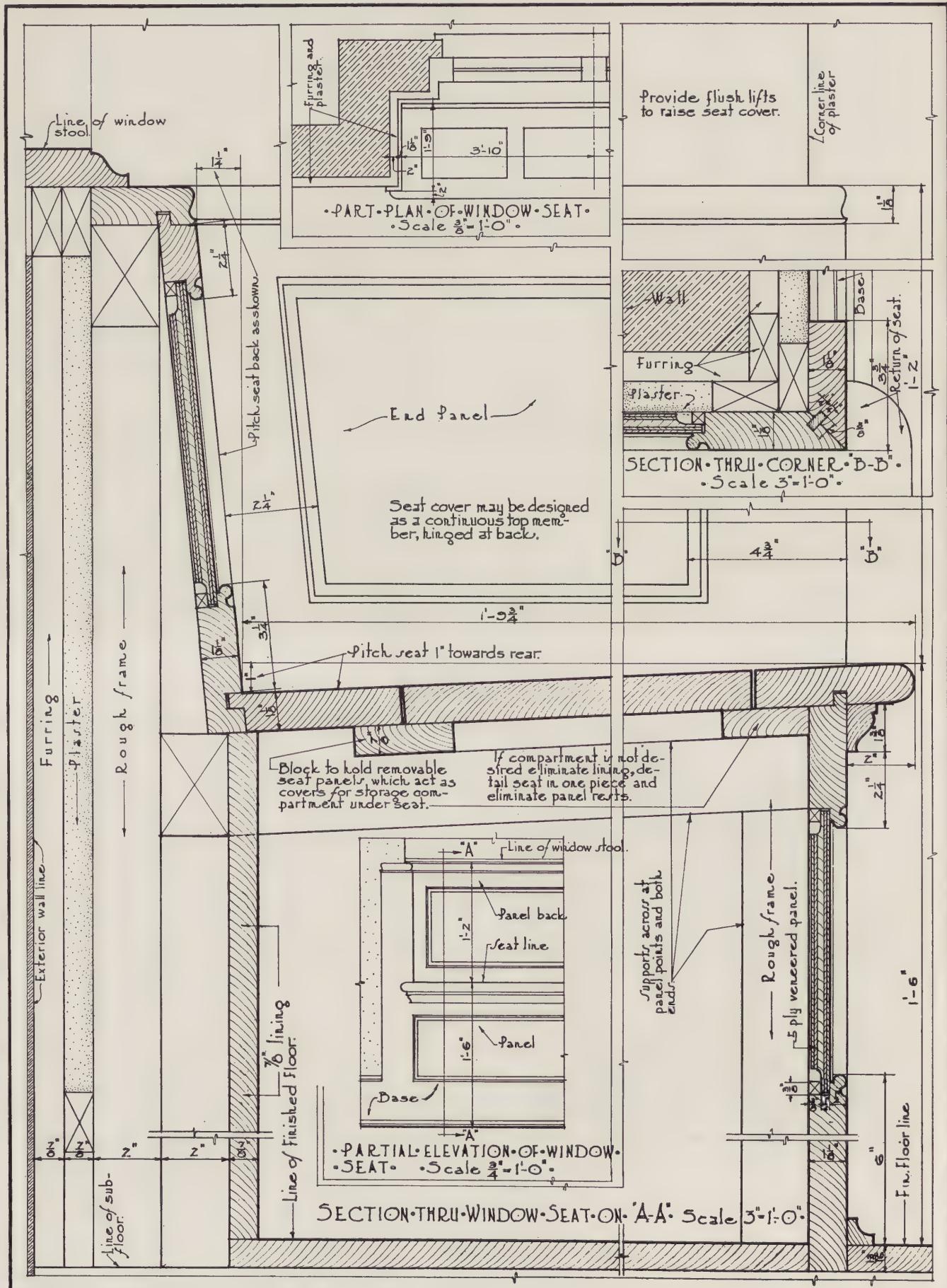


Drawing by Louis Kurtz. Detail of Residence at
Scarsdale, N. Y.



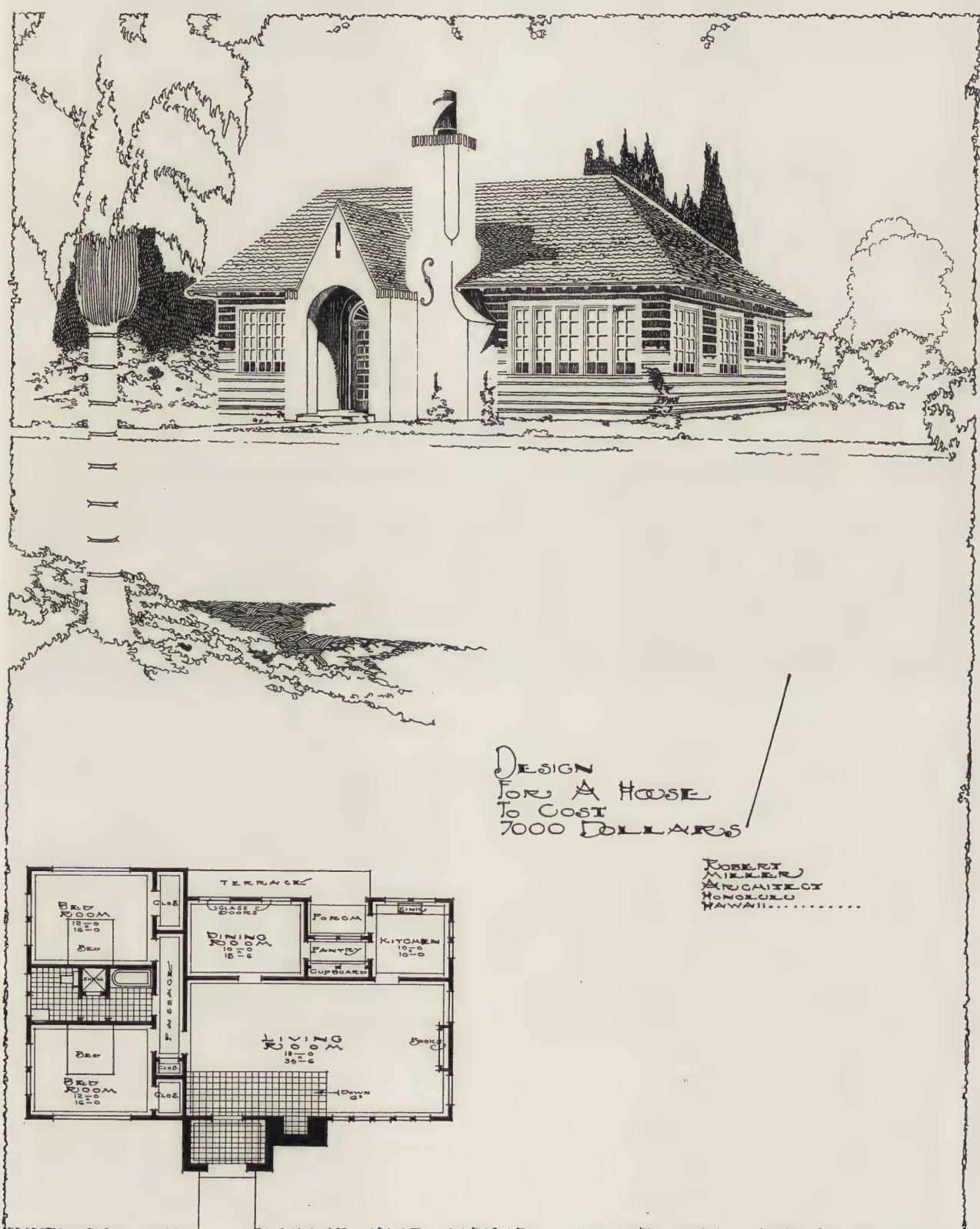
By Carl Jensen, Brooklyn, N. Y.

PENCIL POINTS



Details of Window Seat, from Part II "Good Practice in Construction," by Philip G. Knobloch, now in Course of preparation by the Publishers of PENCIL POINTS.

PENCIL POINTS



Design for a House to Cost \$7,000, Guylor Robert Miller, Architect, Honolulu, Hawaii.

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART XII

DIVISION D, MASONRY

PRECEDING issues have carried these specifications for a Consolidated District School Building through the Divisions of A, General Conditions, B, Excavating, and C, Concrete. We now proceed with the next following Division, that of Masonry, prefacing which we include the customary note, binding the contractor for this division, whether he be general or "sub", by all the terms of the General Conditions, thus:

NOTE. The Contract and General Conditions of these specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these specifications for Masonry. The Contractor shall refer there to as forming integral parts of his contract.

ART. 1. WORK INCLUDED.

(A) THE ITEMS under this Division include:

- (1) ALL COMMON BRICKWORK.
- (2) ALL STRUCTURAL TILE MASONRY.
- (3) ALL GYPSUM BLOCK PARTITION WORK.
- (4) ALL EXTERIOR FACE BRICKWORK.
- (5) ALL INTERIOR GLAZED BRICKWORK.
- (6) BOILER STACK, complete.
- (7) SETTING of all cut stone and terra cotta.
- (8) SUCH OTHER WORK as is herein specified.

ART. 2. GENERAL DESCRIPTION.

NOTE. For convenience of Contractors, there is here given a brief mention, not necessarily complete, of the work of this Division, full description of which will be found in the specifications following, beginning with Art. 3.

(A) ALL EXTERIOR WALLS of building above concrete foundations shall be of common brickwork, with face brick on all exterior surfaces, except where cut stone or terra cotta is provided.

(B) EXTERIOR FACE BRICK shall be used on all outside walls of building and boiler stack where so shown and shall be supplied by the Contractor, as selected by the Architect, at a price of \$40.00 per M for standard shapes and \$75.00 per M for angle brick, all f. o. b. cars, East Millville, P. M.

(C) CUT STONE, both limestone and granite, will be prepared and delivered at site under Division E and shall be sorted and set by Contractor under this Division.

(D) TERRA COTTA will be made and delivered f. o. b. cars, East Millville, P. M., under Division F and shall be hauled to site, sorted and set by Contractor under this Division.

(E) BOILER STACK shall be built (on foundation provided under Division C) of common brick, fire brick, face brick and cut stone. Cast iron lintels and cap, steel bands, ladder-rungs and pipe-clamps shall also be provided and set complete under this Division.

(F) INTERIOR WALLS shall be constructed of various materials as follows:

(1) COMMON BRICK shall be used for all partition walls in basement, except that, where glazed brick facing is specified in connection with same, it shall be made an integral part of the wall.

(2) HOLLOW TILE BLOCKS shall be provided for all interior partitions above basement, except where 2" lath-and-plaster partitions are indicated and where gypsum blocks are permitted.

(3) GYPSUM BLOCKS may be used in place of hollow tile for partitions above basement, except for enclosing stair halls and where glazed brick facing is specified.

(G) TILE FURRING shall be built against outside walls back of all glaze-brick wainscot in such location and above same to ceiling in each case.

(H) GLAZED BRICK shall be provided for wainscoting, of height shown, in two gymnasiums, in bath rooms, locker rooms, boys' and girls' toilet rooms, shops and do-

mestic science rooms. The Contractor shall purchase these brick, as selected by the Architect, at a price of \$50.00 per M for stretchers and headers and \$100.00 per M for bull-noses, all f. o. b. cars, East Millville, P. M.

MATERIALS

ART. 3. BRICK, TILE AND GYPSUM BLOCKS.

(A) ALL COMMON BRICK shall be first quality, sound, hard, well-burned, well-shaped, of even color, free from lime, checks and culs and 95% whole. They shall ring clear when struck together. A dry brick, soaked in water 4 hours, shall not show over 15% increase in weight.

(B) FACE BRICK shall be as selected by the Architect, ranging uniformly between the approved samples. Each face brick shall be in perfect condition when laid in the wall. Octagonal brick shall be so burned, not cut.

(C) GLAZED BRICK shall be in accordance with approved samples, evenly glazed on all exposed faces and free from chips and kiln-marks. Bull-noses shall be provided for all vertical angles, jambs and window stools.

(D) FIRE-BRICK shall be of best approved standard quality, subject to approval of the Architect.

(E) WALL TILE shall be hollow, hard-burned, semi-porous, fire-clay terra cotta tile of best quality. No badly split or warped tile will be accepted. Each piece shall be molded square, true and uniform and shall have a good clear ring when struck with a hammer. No tile may have thru cracks or nicks and none may be used having fiber-cracks greater than 2" at edges or webs or greater depth than $\frac{3}{4}$ ". All blocks shall be free from ingredients liable to stain plaster. Surfaces to receive plastering shall be deeply scored.

(F) GYPSUM BLOCKS shall be made of highest quality calcined gypsum, reinforced with fiber for additional strength and toughness. No sawdust or cinders may be used in the composition. Gypsum shall be shipped in boxcars and stored under roof, free from damp. None that has been soaked by exposure may be used. All shall be sound and dry, with square edges.

(G) SAMPLES of all face, common, glazed and fire-brick, hollow tile and gypsum blocks shall be submitted for approval, showing entire range of variation.

ART. 4. MORTAR MATERIALS, ETC.

(A) ALL CEMENT shall be fresh Portland of approved brand and capable of meeting the test requirements of the American Society for Testing Materials. It shall be delivered in original cloth bags bearing the name and brand of the Maker and none may be used until proven, by tests or otherwise, satisfactory to the Architect. Cement coming in contact with Bedford Stone shall be an approved brand of non-staining. Cement in damp, damaged or caked bags will be wholly rejected. All cement shall be properly stacked in water-and weatherproof sheds, with floors 12" above ground.

(B) LIME shall be mill-hydrate or fresh wood-burned in large lumps. No air-slaked lime may be used. Lime shall meet all requirements of the American Society for Testing Materials. Hydrated lime shall be delivered in original packages, bearing the brand and name of Maker, and shall be stored as specified for cement in preceding paragraph.

(C) MORTAR COLOR shall be of a standard brand and color approved by the Architect, brought on premises in original packages and in sufficient quantity to produce the shade desired.

(D) FIRE CLAY shall be of the best approved standard quality, subject to the approval of the Architect.

(E) SAND shall be composed of clean, hard, durable, uncoated grains and shall be free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam or other deleterious substances. It shall range in size from fine to coarse and the percentage by weight of sand retained on a No. 100 sieve shall not be less than 100, not less than 50% on a No. 50 sieve, not less than 20% on a No. 30 sieve and none on a No. 20 sieve. Volume removable by decantation shall not be more than 1%.

(F) PAINT for Bedford stone shall be approved black waterproof.

PENCIL POINTS

ART. 5. BUILT-IN MEMBERS.

(A) WALL PLUGS AND TIES shall be of standard, heavily-galv. types, approved by the Architect. Plugs shall be No. 20 gage, corrugated both sides and at least $2\frac{1}{2}$ " wide. Ties shall be same gage, not less than $\frac{3}{4}$ " x 6", corrugated full length.

(B) LADDER RUNGS, BANDS AND CLAMPS for chimney walls shall be of structural grade steel, as detailed.

(C) CLEANOUT DOOR, FRAMES, LINTELS AND CAP of boiler-stack be of best grade gray cast iron, in accordance with details and exactly fitting masonry. Standard cast iron door and frame shall be provided for kitchen flue.

(D) ANCHORS for cut stone shall be steel, galv. or tar-coated. Clamps for cornice and coping stones and dowels for balusters shall be bronze.

(E) SLEEVES of No. 24 gage galv. iron shall be provided of proper size, wherever directed, to permit passage of pipes thru walls.

(F) FLUE LINING for smoke and vent flues from kitchen shall be best quality burnt-clay tile of proper size.

WORKMANSHIP

ART. 6. BRICKWORK.

(A) IN GENERAL. All portions of walls, piers and partitions which are not indicated to be concrete, tile, gypsum block, stone or terra cotta, shall be of brickwork, furnished by the Contractor under this Division. All shall be of common brick, except where face brick are called for. Where necessary, walls shall be properly shored and braced until danger from wind or leaning is past.

(B) LAYING COMMON BRICK. All brick shall be thoroughly drenched with clean water just before being laid, except in freezing weather. Bricks shall be well and solidly bedded in mortar, shoved and pressed into place, with no voids either in walls or at window frames. All brickwork shall be laid to a line, inside and outside of all walls.

(C) LAYING FACE BRICK. Face brick shall be used wherever shown on elevations, returning in all jambs. Whole brick culls of same shall be used for inside of all parapet walls above flashing. All face brick shall be laid to line and template and all coursing worked accurately to same, all in best manner by competent press-brick layers. Colors shall be evenly distributed, avoiding patterns other than produced by bond called for.

(D) LAYING GLAZED BRICK. Glazed brick shall be laid on a base of other material or shall start with a soldier-course as shown. Face of brickwork shall be flush with base and with plaster above. Bull-noses shall be used for all external angles and jambs. Except for necessary headers at corners and header courses where made part of bearing wall, all brick shall be laid stretchers, with vertical joints breaking in exact centers of adjoining courses.

(E) EXPOSED JOINTS in common brickwork shall be $\frac{3}{8}$ " to $\frac{1}{2}$ ", level or plumb, as case may be. Joints in interior and exterior face brickwork shall be such as to correspond to dimensions given. Before commencing laying of face brickwork, the work shall be laid out on a template so that bond can be maintained and joints be of practically uniform thickness throughout. Joints shall be struck, raked, flush-cut or concave, as directed.

(F) BOND. Every sixth course of common brick shall be a full header course, bonding with adjoining header courses to complete bond thru wall. Face bricks shall be laid "English cross-bond" with headers bonding with every sixth course of common brick. Glazed brick, where forming part of bearing wall, shall be bonded to same as specified for common brick. Mason Contractor shall furnish galv. iron wall ties to Concrete Workers and direct their placement in concrete beams and lintels against which face brick is to be laid, 2 ties to each sq. ft. of wall. Face bond shall be laid out and adjusted to be continuous thru plain wall surfaces. If brick vary materially in length, an occasional brick shall be neatly clipped to make vertical joints plumb. Where character of bond requires, courses shall start at corners with $\frac{3}{4}$ size brick, but the use of brick less than $\frac{1}{2}$ size shall be avoided wherever possible.

(G) SAMPLE WALL. Before laying any face brick, exterior or interior, the Contractor shall lay up a sample wall of each about 3'0" square, as directed, for the purpose of determining proper size of joints and disposition

of shades and pattern. Changes shall be made until sample wall is approved. All work shall correspond with approved samples.

(H) PROTECTION. The Contractor shall take every necessary precaution to protect face brickwork against staining. Tops of all walls shall be kept covered with boards or waterproof paper when no work is in progress thereon and, at close of work each day, scaffold-plank shall be turned up to prevent dirt splashing against walls.

ART. 7. MORTARS.

(A) CEMENT MORTAR shall be composed of one part Portland cement to 3 parts sand and shall be used for all exterior and interior brickwork below grade in contact with earth and for 2'0" above level of contact with earth, for all granite work, for all piers marked "C" on plans and for all brickwork above roof, such as chimneys, parapet walls, etc. Similar cement mortar, made with non-staining cement shall be used for setting all Bedford stone. Mortar for hollow tile shall be same as cement mortar for common brick, but with 10% of lime added for better working.

(B) LIME AND CEMENT MORTAR. Except where particularly noted, all brick and tile work shall be laid in lime and cement mortar composed of one part lime and 3 parts sand, with 10% Portland cement added just before using.

(C) CAUTION. No cement mortar may be placed in the work after 30 minutes from the time water has been added to same. No ordinary Portland cement, concrete or mortar may be allowed in contact with any surface of finished stonework subject to discoloring. In freezing weather, brick, sand and mortar water shall be heated by approved method.

(D) COLORED MORTAR for all exterior and interior face brick shall be as specified in Par. B, colored with an approved mortar color in accordance with directions of the Maker or the Architect to produce the shade directed. Care shall be taken to have each batch mixed in exact proportion so there will be no variation in shade.

(E) MORTAR FOR FIRE-BRICK shall be fire-clay mixed with water to proper consistency.

(F) GYPSUM MORTAR, used for laying all gypsum blocks, shall consist of one part gypsum cement plaster to 3 parts sand.

ART. 8. CHIMNEYS.

(A) BOILER STACK shall be built with hollow walls as shown, with lining of firebrick laid in fire-clay extending from 2'0" below smoke inlet to height shown. Remainder of flue construction shall be common brick, except where face brick and stone are specified for exposed portion, all laid as specified for those particular materials. All joints, inside and out, shall be cut off smooth as work progresses. Occasional bricks shall be left out in two bottom courses of lining, thru which holes the air-space can be raked out; holes to be bricked in when the Superintendent directs.

(B) IRON WORK. Cast iron cleanout door and frame shall be built into boiler flue at bottom, and hole of proper size left for breeching. Ladder-rungs of $\frac{3}{4}$ " round steel, about 14" o. c., shall extend from 16'0" above grade to top of stack. These and pipe-clamps shall be rigidly built into brickwork. Clamps shall be 10'0" o. c., for support of steam exhaust pipe. Cast iron lintels and cap shall be properly bedded in place as shown.

(C) BREECHING will be set in place under another Division, on concrete slab and this Contractor shall enclose with 8" brick walls as shown, with pressed brick facing.

(D) FLUE-LINING for certain vents and kitchen flue shall be carefully set as walls progress and exactly plumbed. These tile shall be wet when set and shall be laid in same mortar as common brick. Kitchen flue shall have small hinged cast iron cleanout door at bottom, as directed.

ART. 9. SETTING WALL TILE.

(A) CONDITION OF BLOCKS at time of setting shall be as stated in Art. 3. All tile blocks shall be wet when laid, except in freezing weather. Gypsum blocks shall be dry when laid.

(B) LAYING. All blocks shall be set level or plumb, as case may be, breaking joints at least 3" in alternate courses. All blocks shall be laid to a line, each course uniformly level, and in mortar as specified. All blocks shall be close-fitted and neatly trimmed, if necessary,

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against frames and walls and rigidly anchored to same, using long nails for gypsum blocks and approved galv. anchors for tile. Free-standing corners of partitions shall have anchors built into each course, with ends turned up or down into adjoining blocks.

(C) BONDING. All tile walls and backing shall be bonded and tied in best approved manner and laid in mortar as specified. Intersections of partitions shall be laid in-bond and out-bond, alternating.

(D) PARTITIONS of tile or gypsum block shall start on structural floor slabs and be well wedged against under side of slab above. Where suspended ceilings occur, partitions shall extend thru same and finish level at least 6" above. Gypsum block partitions shall start with a course of clay tile on all floor slabs and shall also have clay tile back of plumbing fixtures and brick or tile wainscot. Only clay tile shall be used for basement partitions. All openings shall have lintels or jack-arches over. All structural steel members, except where shown to be covered with concrete, shall be fireproofed by this Contractor with tile masonry as detailed or directed, in conformity with Ordinance and rigidly anchored in approved manner.

(E) BUCKS. All openings in gypsum or tile block partitions, unless otherwise specified, shall have bucks, provided and placed under another Division. Mason shall carefully maintain same in correct position until properly built in and shall not remove stay-bracing until wall over opening is set.

(F) LINTELS. Each opening in partitions and furlings more than 3'3" wide shall have lintel of hollow tile, reinforced with $\frac{1}{4}$ " round rod in top and bottom, and openings filled with 1:3 Portland cement mortar. All such lintels shall be at least 1'0" longer than width of opening.

(G) RECESSES. Where walls are furred, all pipes, conduits and special chases and boxes for plumbing pipe shall be enclosed or formed by 3" tile, well bonded or anchored to adjacent walls or partitions. Where so indicated or required, pilasters shall be formed to enclose piping. Recesses shall be built where required for accommodation of cases and cabinets, with lintels as specified in preceding paragraph.

(H) ANCHORS, TIES AND PLUGS. All anchors, ties, angles, tees and other structural shapes required for support of clay and gypsum tile shall be provided and set by this Contractor, who shall also provide and build in the necessary wall-plugs for attaching wood grounds or finish. Wood plugs will not be permitted.

(I) ALL CUTTING AND PATCHING of this work needed for accommodation of the work of other trades shall be done by this Contractor.

(J) AT COMPLETION of the partition work and immediately after other trades are out of the way, the Contractor shall remove all built-in tile which have been broken (whatever the cause) and shall replace same with whole new tile, so as to leave job in first class condition for plastering and to meet the approval of the Superintendent. All refuse from this work shall then be removed from the premises as specified.

ART. 10. MEMBERS BUILT IN MASONRY.

(A) WALL PLUGS. The Contractor shall provide and build in all requisite metal wall plugs for securing grounds, furring, standing finish etc., all to be located by this Contractor from information obtained from Carpenter. Wherever plugs are needed and not built in as walls progress, this Contractor shall cut holes in masonry for same, correctly placed, and bed the plugs in cement mortar.

(B) OTHER BUILT-IN MEMBERS. This Contractor shall build in all wall sleeves, anchors, plates, lintels and other light steel members, provided by other trades and shall also supply lime mortar to Carpenter for bedding water-bars in reglets in window sills. All such built-in members shall be properly set by this Contractor as walls progress and under direction of Party providing same.

(D) WOOD CENTERS AND TEMPLATES for arches, bays, etc., shall be provided and set by this Contractor, rigidly made of 2" planking and thoroughly braced and tied in place. Centers shall be removed only when so ordered by the Superintendent.

(E) FRAMES. This Contractor shall co-operate with Carpenter in setting door and window frames which shall be true, plumb and correctly located and stay-braced by Carpenter. Stay-braces shall not be removed until frames are entirely built in and masonry set. After walls are

completed around frames, all joints between same and masonry shall be neatly filled all around with cement mortar.

(F) CUTTING AND PATCHING of masonry shall be done by this Contractor at his own expense wherever necessary for other trades. Such work shall be done only by experienced mechanics in workmanlike manner and none may be done which will tend to injure the strength or appearance of any finished work. No avoidable cutting of finished masonry for the purpose of building in members will be allowed. Drilling of face or glazed brick for attachment of other materials and equipment shall be done by this Contractor as required.

ART. 11. CUT STONE AND TERRA COTTA.

(A) HAULING TERRA COTTA from cars to job shall be done by men experienced in handling such materials, who shall use methods that will prevent the least injury to same. Liberal use shall be made of the straw or other packing from the car and same shall be again used between all pieces piled at the job. This Contractor shall provide plank which shall be used in all cases to keep terra cotta off the ground. He shall also receipt for each shipment but shall accept only material in perfect condition. He shall immediately report to the Architect any that is in any way defective.

(B) DELIVERY OF CUT STONE, including granite, at site by Producers will be in convenient location as directed by this Contractor, but such unloading is not to include sorting or distributing around the building. This Contractor shall supply necessary substantial planking on which stone is to be laid, shall inspect same during unloading and issue receipt for each load. He shall not accept any other than perfect stone as he shall be solely responsible for all chipping and other damage after receiving.

(C) SORTING AND STORING of terra cotta and stone shall be done by this Contractor in manner to best expedite the work. Members shall be distributed around building ready for setting but not in such manner as to block passages or storage space assigned to others. All members shall be kept on sufficient planking and supported well up from ground so as not to be subject to earth-stains.

ART. 12. SETTING STONE.

(A) IN GENERAL. All cut stone, including granite, shall be set by this Contractor in accordance with approved details and setting diagrams which will be supplied by Producer to show arrangement of joints, bonding and anchors. Each member shall be set in its proper place, as no unnecessary substituting will be permitted.

(B) CUTTING AND FITTING, if any is required to correct dimensions of stone not in accordance with details, shall be promptly done by experienced cutters supplied by Producer of stone.

(C) PAINTING. All limestone surfaces in contact with mortar shall be painted shortly before setting with a thorough coat of approved waterproof paint completely covering all portions. After setting, the back of all stone work shall be gone over and all places not well covered, including mortar-joints, shall be retouched for complete coverage, so that no brick mortar can reach the stone.

(D) SETTING. Each stone shall be set in a full bed of soft mortar (as elsewhere specified) and tapped down with a wooden mallet to a full and solid bearing. Small stones may be set by hand, but each one weighing over 50 lbs. shall be placed by derrick.

(E) JOINTS shall be of uniform thickness, not exceeding $\frac{1}{4}$ ", and as shown by drawings. Where not so shown, the Contractor shall not proceed without proper information. No joints other than those on approved setting diagrams will be allowed, except by Architect's special permission. All face joints shall be left open at least $\frac{1}{2}$ " for pointing. Sills shall be bedded at ends only. Back of all stone work shall be plastered with $\frac{1}{4}$ " of non-staining mortar before any brick-backing is started.

(F) DOWELS, ANCHORS ETC. This Contractor shall provide all metal anchors, clamps, dowels, etc. for securing stone in wall. Each stone over 24" long shall have 2 anchors and smaller members one each, countersunk in top bed. Anchors shall be $\frac{3}{16}$ " x 1", extending to within 4" of inside face of wall. They shall have one end turned down $\frac{3}{4}$ " into stone, 2" from face, and the other turned up $\frac{3}{4}$ ". Each baluster and mullion shall have top and bottom dowel. Adjacent stones of cornices and

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copings shall have clamp at each joint as detailed, in sinkages cut deep enough to permit 2" of fill over each anchor.

ART. 13. SETTING TERRA COTTA.

(A) IN GENERAL. All setting of terra cotta shall be done by experienced Setters, each piece in true location on a full bed of mortar and all joints well filled. Joints shall be of size and location to exactly correspond with Producer's setting diagrams.

(B) BACKING shall be done by brick Masons and shall include filling of all voids in terra cotta to plane of outer surface of wall. Backing shall be carefully inspected by terra cotta Setters who shall promptly report to the superintendent for correction any work that has been forced out of position.

(C) ANCHORS AND SUPPORTS shall be built in wherever required. Where necessary, they shall be supplied to Mason to be built into his work ahead of terra cotta setting. Suspended members shall be placed and anchored with special care and opportunity given the Superintendent to inspect same before anchorage is covered.

ART. 14. PROTECTION, REJECTION, CLEANING AND POINTING.

(A) CLEANING. All exposed interior and exterior face brickwork, cut stone and terra cotta shall be cleaned with a stiff brush as work progresses and shall be left clean at completion. Water for cleaning limestone may contain soap but no acid. If necessary, a small amount of muriatic acid may be mixed with the water used for cleaning brick and terra cotta, care being taken to prevent same coming in contact with stone.

(B) PROTECTION. All projecting stone and terra cotta liable to damage after setting shall be properly protected by suitable planking well supported. Washes of water-table and belt courses shall have protection strip of heavy roofing felt built into joint above and left until removed for pointing. Jambs and sills of openings used for passage shall be securely boxed.

(C) REPLACEMENT. Any stone or terra cotta member showing damage or disfigurement during progress of work shall be replaced in its entirety at the expense of this Contractor. No patching or hiding of defects will be permitted, hence all such must be promptly reported in order that replacement may be made by Producer without causing delay in the work. The Architect will decide at whose expense such replacement shall be made.

(D) POINTING. All joints in cut stone and terra cotta shall be carefully raked out and pointed as directed by the Architect, using non-staining cement mortar for cut stone and colored mortar for terra cotta. Joints in terra cotta, subject to extreme weather conditions, shall be filled with elastic cement and not repointed.

THE DRY CELLAR

(Continued)

By OTTO GAERTNER

THE cellar floor construction also needs proper attention. The excavation should be made amply deep to receive the proper thicknesses of fill, tilford, finish, etc. Often boulders or stone occur in the excavation and the tops extend into the fill and sometimes into the finish. This permits water, if any is present, to follow the joint between the boulder and the finish so close to the floor surface that it has no difficulty in reaching the surface. Often such a surface will peel off over the boulder because it has not a proper bond. Also in winter if the house is unoccupied or if the cellar happens to be a cold one, any water in such a joint will freeze, causing the floor to bulge. When there is a proper fill under the finish no moisture can lie there to freeze and cause damage. The finish should be of cement mortar consisting of one part of Portland cement and two parts of sand well troweled to an even surface at least one inch thick.

Below the cement finish there should be at least four inches of cinder or stone concrete, and below the stone concrete there may be placed an additional layer of cinders, broken stone or tilford. Such a tilford is often made by throwing excavated stones and broken boulders back into the excavation where it has been dug deeper for this purpose. Such a layer at least six or eight inches thick should always be laid under the rough concrete for outside pave-

ments, area floors, steps, etc., so that the moisture underneath can drain off. That which may remain can, if it freezes, extend into the voids of this layer without exerting enough upward pressure to heave the pavement. Such a layer does not lessen the necessity of draining surplus water entirely away from the excavation.

While for ordinary conditions the above floor will do, it may be necessary to strengthen it if water pressure exists. If the floor is waterproof by a waterproofed coat of cement mortar finish the strength of its adherence to the rough concrete must not be exceeded by the waterpressure. If the rough concrete as well as the finish are waterproofed, the concrete and finish must have sufficient strength and weight to counteract the water pressure. It may be necessary to increase the thickness of the rough concrete or it may be necessary to reinforce the concrete with wire mesh or reinforcing bars. Such reinforced concrete must be figured as an inverted reinforced concrete slab and the mesh put in the upper part of the slab since the pressure is exerted from below. Reinforced concrete slabs have the advantage of eliminating shrinkage cracks but if mass concrete is to be used instead, roughly a six inch thickness is required for every foot of head of water to counteract the pressure.

If membrane waterproofing is used, there must be a layer of concrete at least three inches thick on which to apply it. After the waterproofing is done the remainder of the concrete and the finish, at least five inches in all, must be placed over it. Since the water pressure is exerted against the waterproofing membrane it must be held in place by sufficient weight of plain concrete or by reinforced concrete, for the same reason the membrane waterproofing when applied to walls is placed on the outside or within four inches of the outside of the wall so that the wall thickness on the inside keeps it in place.

The membrane method of waterproofing consists of applying successive alternate layers of heavy felt, paper, or textile material and a waterproofing compound, coal tar pitch, or preferably asphalt to the outside of the walls and extending it through the walls and into the entire cellar floor. Heavy felts and textile materials are preferable. If only damp-proofing and ordinary waterproofing is required two layers of felt are used but for some waterproofing as many as four are required. Coal tar pitch and any product that becomes hard and brittle is not recommended because expansion and contraction due to changes of temperature, and settlement will crack the hard and brittle substances and permit the water to force its way through. The best compounds and asphalts to use are the ones which remain tacky and are flexible to move with the adjacent materials without causing a discontinuation of the surface.

It is important that the walls and floors should be fairly smooth and clean. All large projections should be removed and all holes filled in so that the fabric will not be ruptured. All surfaces should be dry so that no steam will be formed when the hot waterproofing materials are applied and so that the materials will adhere properly.

The asphalt should be such as will form a permanent mechanical bond not only to the fabric and the masonry to which it is applied, but also to any masonry that may be poured, troweled, or built against it without the use of a primer. A primer of thinned asphalt should be specified for "dusting" or frozen concrete walls only. It is of great importance to specify the quantity of material to be applied. For a job consisting of two ply of asphalt saturated fabric and three moppings of heated waterproofing asphalt, not less than twenty-five square yards of fabric and twelve and one half gallons of asphalt should be used for each one hundred square feet of horizontal surface, and 14 gallons of asphalt for vertical surfaces. The asphalt should be heated to a temperature of not over three hundred and fifty degrees Fahrenheit and none should be applied in wet weather or in freezing weather unless special provision is made to keep the masonry and waterproofing materials warm and dry. The fabric should have at least two inch laps and twelve inch end laps. All asphalt moppings must be continuous so that no fabric touches the masonry and no two layers of fabric touch each other, or any protection applied after the waterproofing is in place.

(To be Continued)

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PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

The Book of Beds.—Illustrated booklet on concealed beds of all types. Floor plans showing installations. Carefully indexed. $8\frac{1}{2} \times 11$. Concealed Bed Corporation, 58 East Washington St., Chicago.

Murphy's Blue Print Manual.—Illustrated manual detailing in workable blue-prints practical applications of ways to reduce floor space in planning by the use of door beds and other Murphy equipment. 42 pp. $8\frac{1}{2} \times 11$. Murphy Door Bed Company, 22 W. Monroe St., Chicago.

36th Edition of K & E. Catalog.—Complete list and description of drawing instruments, tracing papers, etc. with order numbers. Price-list attached. 482 pp. 6 x 9. Bound. Keuffel & Esser Co., Hoboken, N. J.

Published by the same firm. Leaflets describing individual products, such as Transits & Levels, Slide Rules, Lettering Pens, etc.

The Six Quick Steps.—Illustrated booklet dealing with Bull Dog Floor Clips. Indexed. $8\frac{1}{2} \times 11$. 24 pp. The Bull Dog Floor Clip Co., 108 North First Ave., Winter-set, Ia.

Drain Specifications, Drawings.—Drain specifications for factory, area floor, narrow valley roof gutter, garage floor, hospital floor and urinal stall. Five latest sheets of fifteen detail drawings now available showing drain installation in construction. The Josam Manufacturing Co., 4908 Euclid Ave., Cleveland, Ohio.

Kewanee Firebox Boilers.—Catalog 78. Very complete booklet giving specifications for various types, with tables of setting and foundation measurements, etc. 50 pp. 6 x 9. Kewanee Boiler Company, Kewanee, Ill.

Insulation.—Booklet dealing with subject. Description of Nonpareil High Pressure Covering and tables of thicknesses, specifications, etc. 62 pp. 5 x 7. Armstrong Cork & Insulation Company, 24th St. and Allegheny River, Pittsburgh, Pa.

Catalog No. 90.—A.I.A. File No. 33G. Describes and illustrates ES Curtain Gate Fenders for collapsible elevator car gates, a new invention to prevent injury to operators and passengers. Elevator Supplies Company, Inc., 1515 Willow Avenue, Hoboken, N. J.

Published by the same firm. E.S. Bulletin Number Twelve. Dealing principally with the ES Selective Signal System and Automatic Transfer.

Enamored Plumbing Ware.—Catalog F.—Very complete illustrated list of Kohler products. Indexed. 215 pp. $7\frac{1}{2} \times 10\frac{1}{2}$. Kohler Co., Kohler, Wisconsin.

Paints and Waterproofing.—A series of attractive folders prepared especially to give information to the busy man on a wide variety of matters pertaining to protective paints, damp-proof coatings, cement and mortar colors, etc. Ask for complete set of literature for architects. Toch Brothers, 320 Fifth Avenue, New York City.

G&G Atlas Systems.—Catalog No. 1755. A.I.A. File No. 35h21. Illustrates and describes Atlas Pneumatic Tube systems and supplies; with details as to saving in floor space, personnel, power, maintenance and time. 8 pp. G&G Atlas Systems, Inc., 535 West Broadway, New York City.

Benjamin Electrical Products.—Catalog 24. Valuable information on lighting fixtures, wiring devices, signals, etc. Indexed. Price lists, etc. 181 pp. 8 x 10 $\frac{1}{2}$. Benjamin Electric Mfg. Co., 120 So. Sangamon St., Chicago, Ill.

Samson Spot Sash Cord.—Attractive 4-page leaflet briefly setting forth merits of Spot Sash Cord and giving Size Numbers with dimensions. Sample of Spot Sash Cord included. Samson Cordage Works, 88 Broad Street, Boston, Mass.

Property Protection.—Catalog No. 16. Illustrates and describes types of Cyclone Fencing with specifications. Explains Cyclone Fence Service. $8\frac{1}{2} \times 11$. 20 pp. Cyclone Fence Company, Waukegan, Ill.

Published by the same firm. Catalogue No. 14, Cyclone "Red Tag" Fence and Products. Includes information on ornamental lawn fence and gates, fence for schools, tennis-courts, athletic fields, etc. List prices given.

Home Beautifiers.—Catalog of china accessories for bath room and kitchen equipment describing the "Easy-Set" fixtures for attachment to flat surfaces and the "Unity" line for recessing into walls. 24 pp. 6 x 9. J. H. Balmer Co., 259 Plane St., Newark, N. J.

Elastic Glazing Composition and Elastic Seam Composition.—Complete information on uses for caulking, cementing, etc. may be had by writing H. B. Fred Kuhls, 65th St. and 3rd Ave., Brooklyn, N. Y.

Temperature Regulating Systems.—Catalog explaining Gold's Electric Thermostat systems for the automatic control of steam, hot water or hot air heating apparatus in residences, offices and buildings. Complete information in the form of illustrations, specifications, plans, sizes and pressures. Interesting testimonial from users of Gold's systems. $8\frac{1}{2} \times 11$. 32 pp. Gold Car Heating & Lighting Co., 220 36th Street, Brooklyn, N. Y.

Electric Refrigeration for the Home.—16 page booklet showing different complete models with specifications. 6 x 9. Delco-Light Company, Dayton, Ohio.

Johns-Manville Service to Industry.—Book of valuable technical information on various lines, including a collection of tables of engineering data. 260 pp. $8\frac{1}{2} \times 11$. Johns-Manville, Inc., 296 Madison Ave., New York City.

Published by the same firm. Industrial Flooring. 8 page leaflet containing description, comparative table and general specifications.

Metal Building Specialties.—A.I.A. File No. 16E2. Leaflet illustrating and describing various items such as corner beads, laths, door and window casings, etc. $8\frac{1}{2} \times 11$. 20 pp. The General Fireproofing Company, Youngstown, Ohio.

Published by the same firm. Steel-Tile. A statement of the many accepted advantages of GF Steel-Tile Floor Construction; with a collection of tables for designing and building Steel-Tile Floors, and a complete specification for the work from start to finish. 32 pp. $8\frac{1}{2} \times 11$.

Southern Yellow Pine Flooring.—Technical Bulletin No. 1. A.I.A. File No. 19e8. 8 page leaflet describing types of flooring, etc. Includes table of recommended grades and sizes for use in architectural work. Southern Pine Association, New Orleans, La.

Whiting's Brushes.—Catalogs 85 and 86 describing complete line of brushes for varnishing, paper hanging, etc. $4\frac{1}{2} \times 8$. 216 pp. Whiting-Adams Co., Boston, Mass.

Stedman Reinforced Rubber Flooring.—A.I.A. File Number 23c. Illustrated booklet with specifications and technical data. Color plates illustrating 12 of the better colors used and recommended. Stedman Products Co., South Braintree, Mass.

Major Flood Light Unit.—Bulletin No. 5. Describing the construction and adaptability of the Major Unit for efficient floodlighting in theatres, show-windows, mills, etc. List prices and dimensions. Major Equipment Company, Inc., 360 N. Michigan Blvd., Chicago.

Published by the same firm, various bulletins on Stage Pockets, Louver Light, Footlights, etc.

The Story of Oak Floors.—A profusely illustrated brochure containing interesting story on oak with colored plates showing grains and finish. 24 pp. 6 x 9. Oak Flooring Bureau, 887 Hearst Building, Chicago, Illinois.

Baker System Refrigeration.—Illustrated catalog with sectional drawings describing use for hotels, hospitals, apartments, etc. Data blank enclosed for securing preliminary cost estimates. Baker Ice Machine Co., Inc., Omaha, Nebraska. 20 pp. 9 x 12.

Catalog No. 47.—Complete information illustrated and indexed. Price lists. 7 x 10. 40 pp. Bommer Spring Hinge Company, 263 Classon Ave., Brooklyn, N. Y.

Artist and Drawing Materials Catalog.—Complete illustrated list of drafting room supplies. Price list attached. 352 pp. 6 x 9. F. Weber Co., Dept. PP., 1220 Buttonwood St., Philadelphia, Pa.

Dependable Drawing Materials.—14th Edition. Complete list of drafting room supplies. 356 pp. 6 x 9. The Frederick Post Co., 3617 No. Hamlin Ave., Chicago.

Ventilation Data Book.—Valuable handbook of data on the air-moving capacity—the ventilating ability—of roof ventilators. Contains capacity tables, average wind velocities in different sections, wind forces, etc. $8\frac{1}{2} \times 11$. 38 pp. H. H. Robertson Co., 1st Nat'l. Bank Bldg., Pittsburgh, Pa.

Steel Lockers, Cabinets, Partitions.—Catalog F A.I.A. File Number 28a1. Illustrates and describes types of lockers for business and institutional use. 16 pp. The Hart and Hutchinson Co., New Britain, Conn.

The Premier Water Heater.—Architects' File Manual describing Premier insulated automatic storage gas water heater. Detailed information as to sizes, specifications and capacities. A.I.A. File No. 29d2. 16 pp. Prices. Crane Company, 838 S. Michigan Ave., Chicago.

Roof Ventilators—Window Ventilators.—4-page leaflet illustrating and describing types of ventilators. Tables of sizes and capacities given. The V-W Ventilator Company, 35 E. Gay St., Columbus, Ohio.

Pneumatic Tubes—Catalog No. 4.—Complete description of various tube systems, their uses, and details of installation. 22 pp. $8\frac{1}{2} \times 11$. Standard Conveyor Company, North St. Paul, Minn.

Published by the same firm—Catalog No. 3.—Illustrates conveying machinery installed to handle material in textile mills, machine shops, bakeries—wherever conveying is done. 20 pp. 8\frac{1}{2} x 11.

Specification Catalogue No. 17 for Architects and Engineers.—Dealing thoroughly with the subject of air conditioning. 31 pp. $8\frac{1}{2} \times 11$. Helmer Air Conditioning Corp., 103 Park Avenue, New York City.

Stereo System of Vapor Heating, Bulletin No. 36.—A.I.A. File No. 30c2. Describes system, illustrates equipment and includes information on estimating and installing. 12 pp. Sterling Engineering Co., Milwaukee, Wis.

Lumber Data.—Loose leaf folder of information sheets on California White & Sugar Pine products. $9\frac{1}{2} \times 12$. California White & Sugar Pine Manufacturers' Association, 680 Call Building, San Francisco, Cal.

Ace Steam Traps.—Catalogue A. 12 page leaflet of diagrams, construction details, capacity tables, etc. 6 x 9. The W. B. Connor Co., Inc., 223 West 33rd St., New York City.

"White" Door Beds and Space Saving Conveniences.—4-page circular giving brief details of the construction of the "White" Door Bed. Also includes photographs and descriptions of other products including dressing table, buffet cabinet, kitchen cabinet, range, etc. The "White" Door Bed Company, 130 North Wells St., Chicago.

PENCIL POINTS

VOLUME VI

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RUSSELL WHITEHEAD BECOMES EDITOR OF PENCIL POINTS

IT IS with pleasure that we announce to our readers that Mr. Whitehead, for many years prominently identified with architectural publishing in this country, has assumed the editorial direction of this paper.

Most architects are familiar with Mr. Whitehead's many-sided activities in this field, but for the benefit of some, especially of the younger generation, it may not be amiss briefly to outline Mr. Whitehead's achievements.

Something over fifteen years ago Mr. Whitehead, having completed his studies at Princeton and Drexel and having served his apprenticeship over the drafting-board, opened an office in New York for the practice of his profession. Almost before he had a chance to sharpen his pencil and get ready for business he was offered and accepted the editorship of *The Architectural Record*, with which the writer had the honor of being connected at that time. His achievements in that position were considerable as his taste in selecting material and his skill in presenting it, both pictorially and typographically, established a new standard for those times. We moved together in 1912 to become interested as part owners of *The Brickbuilder*, which subsequently became and now is known as *The Architectural Forum*. It may be said that Mr. Whitehead's editorial talents were in no small degree responsible for the success of that journal, as under his direction the scope of the publication was broadened to include not only architecture of burnt clay but also of other materials used to interpret the designs of that day.

Ten years ago Mr. Whitehead's ability as a publisher came to the attention of the White Pine Bureau, a powerful organization which desired to bring about a better understanding of its products through the establishment of a publication which would appeal strongly, because of its merit, to members of the architectural profession.

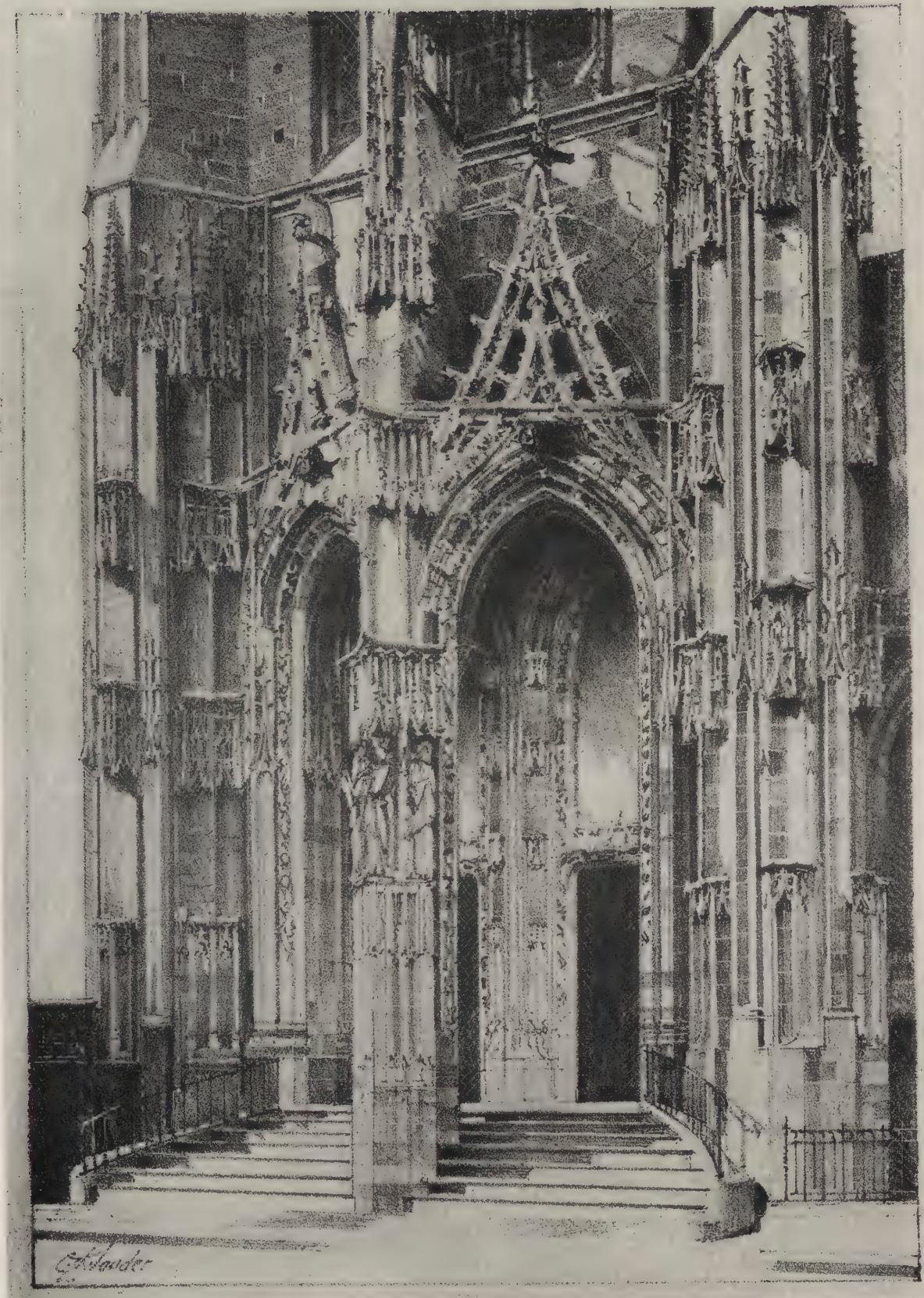
The White Pine Series of Architectural Monographs came into being at that time, Mr. Whitehead becoming the editor and publisher, acting for the White Pine Bureau. Practically every architect and draftsman in the country is familiar with this most valuable work which has been published without interruption since that time. Recently Mr. Whitehead has concluded an arrangement with the former sponsors of the White Pine Series whereby he becomes outright the owner of the publication, and which he now publishes at a subscription price as a personal enterprise, in no manner connected with the activities of The Pencil Points Press. Having built up an organization to take care of the details of his publishing business he finds it possible to take charge of the editorial department of PENCIL POINTS. He brings to this work a wealth of publishing experience which will, without doubt, be favorably reflected in these pages.

Not only am I sure that the high standards which we have already established for our work will be still further improved upon, but it is a source of personal gratification to be once more actively associated with a man with whom I have worked so pleasantly in the past.

Mr. Whitehead is anxious to hear from all readers of PENCIL POINTS who have suggestions to make regarding useful editorial features for next year. Our policy of working closely with our readers so that we may render the maximum of service for the drafting-room will be followed, and suggestions of all kinds will be given most careful consideration and will be incorporated in future issues if deemed to be valuable to our field as a whole.

We predict even greater things for PENCIL POINTS with Mr. Whitehead to direct our editorial policy.

RALPH REINHOLD.



LITHOGRAPHIC CRAYON DRAWING BY CHARLES Z. KLAUDER
Entrance to Church St. Germain Argentan.

MASTER DRAFTSMEN, XV

CHARLES Z. KLAUDER

THE FORCE of genius is strikingly shown in the career of Charles Z. Klauder. The architect of the proposed Cathedral of Learning at Pittsburgh, of notable groups of buildings at Princeton, Wellesley, Yale, Cornell and at various other seats of learning, as well as of many buildings of the highest architectural character, has made his way by the possession of genius. It has enabled him to solve problem after problem in a distinctive and highly satisfactory way and to give an unusual degree of spirit to his buildings and to his drawings. This force has carried him upward and onward, for Klauder started his architectural career when a boy of fifteen by going to work in an architectural office and has acquired the high degree of scholarship which he possesses by his own effort—through his ability to absorb information, to sort it mentally and to incorporate what he found suited to his purpose into his equipment for the practice of architecture.

The origin of genius is often less clear than its operation. In the case of Mr. Klauder this is true, for his forbears on both sides were simple, capable, substantial people who showed no trace of genius within the two or three generations about which it is possible to learn anything definite. There is, of course, such a thing as a "throw back," in some cases, to an ancestor who exhibited marked ability. It seems most reasonable to assume that genius is the result of the possession by a person of a special combination of qualities which, working together, produce this quality. This does not necessarily call for any "throw back." A man may be the first in his line to have this fortunate combination of qualities. Perhaps that is the case with Klauder. Speculation on such a point as this is vain, the man's works are in evidence.

The careful training in drawing which he received when very young in classes conducted by the local Turnverein he considers of very great value to him. The work consisted largely in making careful copies of drawings of subjects shown on printed sheets prepared especially for this form of instruction. This probably had something to do with giving him the command of his hand that makes possible his remarkable freedom in drawing. Where a pupil of

less ability would have found such copying deadening and a hopeless barrier to the cultivation of freedom at a later period, he evidently derived benefit from it and was able to use it as a stepping stone to further development.

Upon the completion of his course in grammar school, Klauder went to work at the age of fifteen in the office of Theophilus Chandler. He remained in

that office about six years all together with the exception of short intervals during which he worked in other offices. He then entered the employ of Walter Cope with whom he remained for several years. He was engaged upon the plans for the Museum of Archaeology of the University of Pennsylvania. He spent several months in the office of Frank Miles Day and then went with George Keister, after which he traveled in Europe. Upon his return to this country he became once more connected with the office of Frank Miles Day, this time as chief draftsman. In 1910 he was admitted to partnership and the firm became Day Brothers & Klauder. In 1913, Frank Miles Day's brother withdrew and the firm became Day & Klauder. In 1918, Frank Miles Day died. Since that time Klauder has conducted the practice of the office

under the firm name of Day & Klauder.

The facility with which Klauder sketches is one of his outstanding accomplishments. When a problem is presented to him he visualizes a solution and roughs it in on paper with a few strokes of a surprising effectiveness. An example of this method is a sketch he made at Wellesley to show his idea for the placing and general design of a group of proposed buildings. The sketch was made on the spot and unhesitatingly contained all the essentials of the finished design which did not show any change in the *parti*. It was all in the first rough sketch, so well conceived that further study was only a matter of detail and draftsmanship.

A type of drawing that Klauder employs to great advantage is that shown on page 44, the "Tower, Concordia Seminary, St. Louis." This drawing was made in red crayon on tracing vellum over a care-

(Continued on page 49)



CHARLES Z. KLAUDER.

PENCIL POINTS



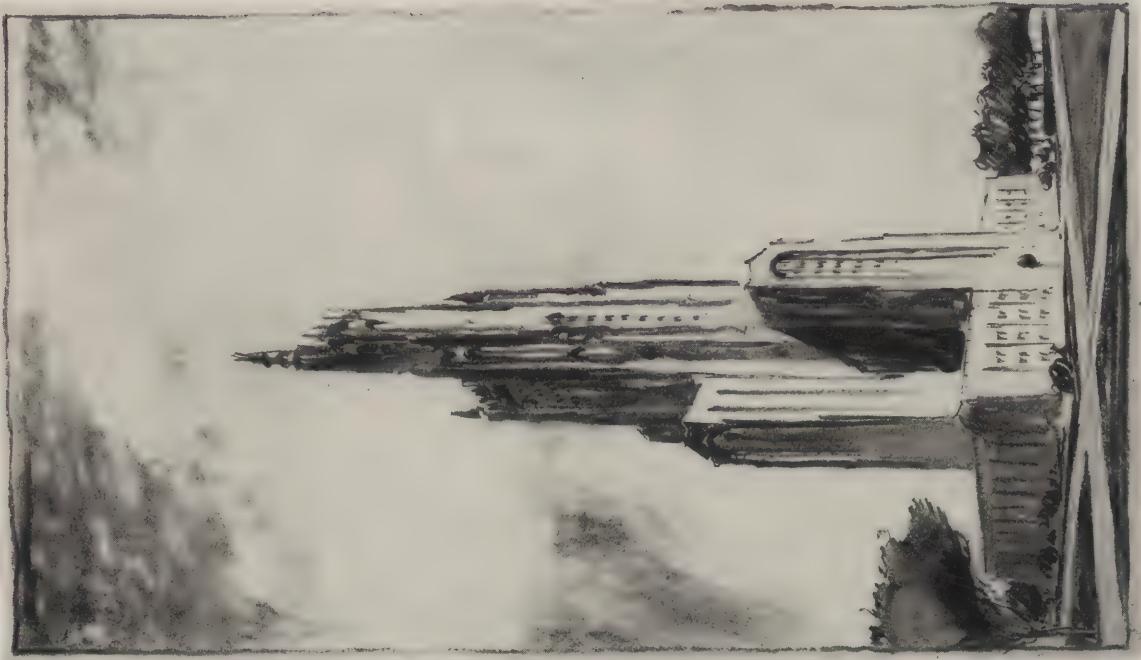
DRAWING IN RED CRAYON ON TRACING VELLUM BY CHARLES Z. KLAUDER
Tower, Concordia Seminary, St. Louis, Missouri.

MASTER DRAFTSMEN SERIES—CHARLES Z. KLAUDER.



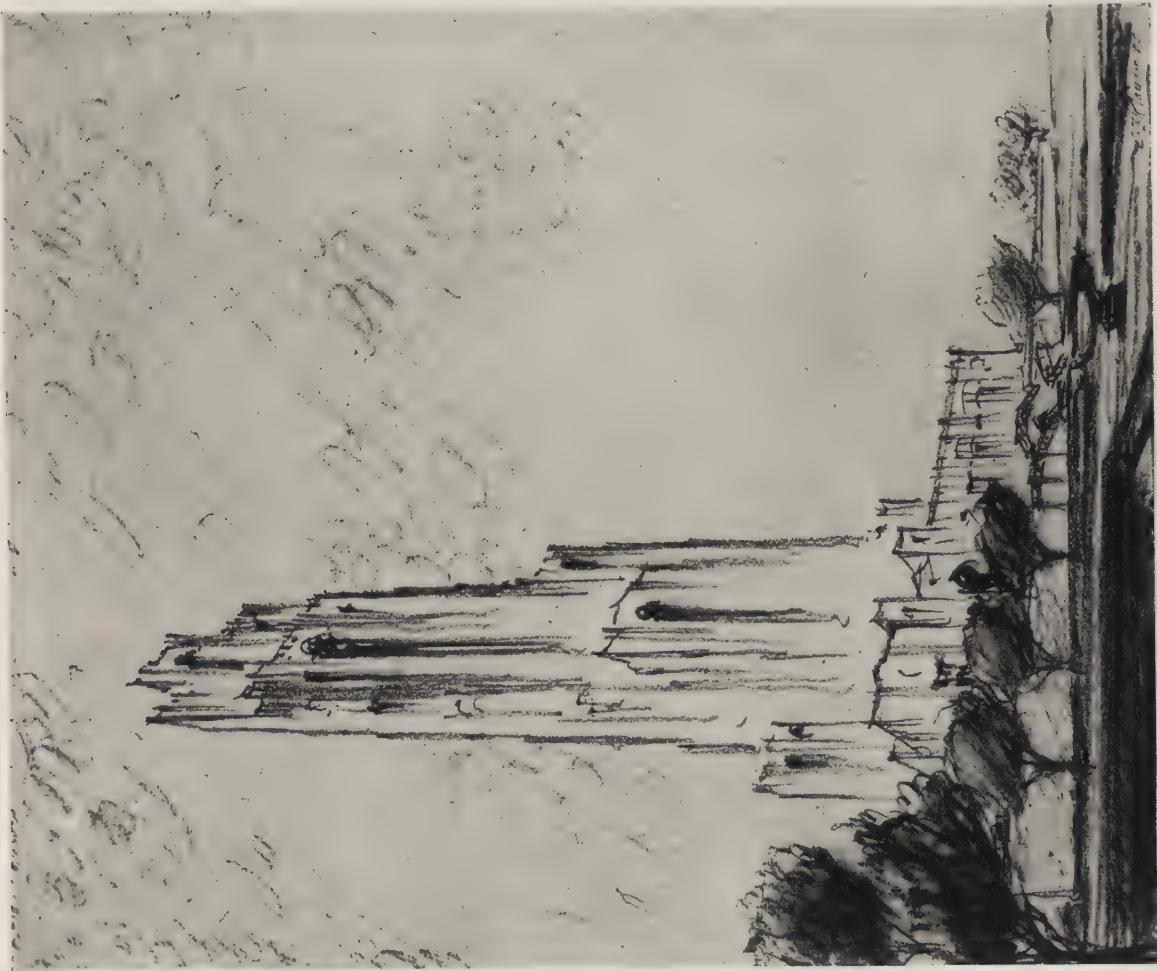
DRAWING IN RED CRAYON ON TRACING VELLUM BY CHARLES Z. KLAUDER
Tower, Wellesley College, Wellesley, Massachusetts.

Charcoal on Thin Tracing Paper

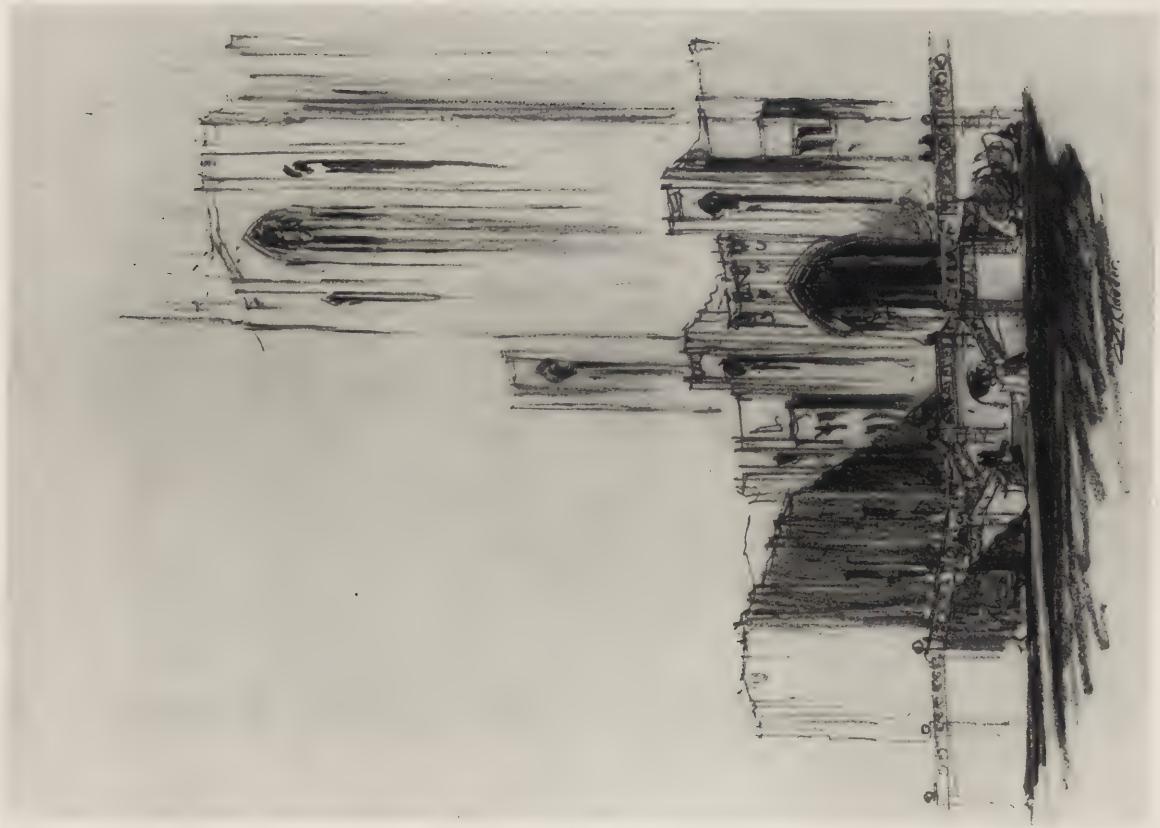


Red Crayon on Tracing Vellum

PRELIMINARY STUDIES BY CHARLES Z. KLAUDER FOR CATHEDRAL OF LEARNING
UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA.



Lithographic Crayon on Tracing Vellum.
PRELIMINARY STUDIES BY CHARLES Z. KLAUDER FOR CATHEDRAL OF LEARNING
UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA.



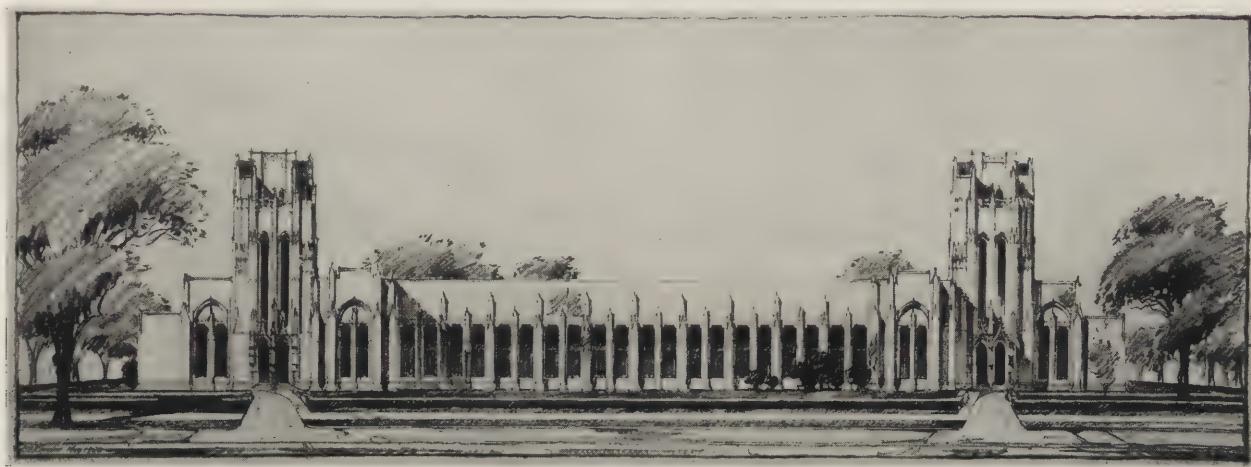
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WATER COLOR RENDERING BY CHARLES Z. KLAUDER

Cathedral of Learning, University of Pittsburgh.

MASTER DRAFTSMEN SERIES—CHARLES Z. KLAUDER.



Red Crayon Drawing on Tracing Vellum by Charles Z. Klauder.
PEABODY MUSEUM, YALE UNIVERSITY, NEW HAVEN, CONNECTICUT.

(Continued from page 43)

fully laid out perspective projected from the plan and elevations of the proposed tower.

Drawings of this kind serve as a very important means of study. In such a perspective the plan and elevations are coordinated. If when the plan and elevations are translated into the perspective the effect of the latter is not satisfactory in design the changes needed to make it satisfactory are sketched in and projected back to the plan and elevations which are changed to correspond. By this means it is possible to design in such a way that when built the structure will present the desired appearance when seen in perspective. For instance, if the perspective drawing shows a tower that is not smooth in profile, if the relation of the diagonal width at the top to the diagonal width at the bottom is not satisfactory the perspective is modified and the change is quite positively transferred back to the measuring line of the instrumental perspective that underlies the sketch and consequently to the elevations and the plans.

When the design has been studied in this way a fresh piece of tracing vellum is laid over the corrected instrumental

perspective and the picture drawn in boldly over the lines of the lay-out. In working over one of these tight perspectives it is essential for the draftsman to "loosen up," not an easy thing to accomplish, with an instrumental drawing for a starting point. Relax one must, however. It is in the success with which Klauder relaxes and translates these instrumental perspectives into pictures with bold, sure and wonderfully expressive lines that he shows his greatest mastery in draftsmanship. Sometimes what was started as an unimportant study becomes so interesting and good that it is carried to completion as a picture. Among the drawings in Klauder's office is one that developed in this way after it was started on a piece of tracing vellum that was not large enough to go all the way to the bottom of the picture. A piece of the paper was pasted on and the drawing carried down. It is one of the best.

Among the points studied in such drawings as that of the tower of Concordia Seminary, shown on page 44, are the refinements that are among the most admirable features of Klauder's designs. For instance this drawing shows the "sink-



Red Crayon Drawing by Charles Z. Klauder.
STUDY FOR TOWER, YALE UNIVERSITY.

(Continued on page 57)



WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Cloister—Dining Halls, Princeton University.



WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Dormitory, Cornell University, Ithaca, N. Y.

PENCIL POINTS



WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Stock Pavilion, Pennsylvania State College.



RED CRAYON DRAWING ON TRACING VELLUM BY CHARLES Z. KLAUDER
Dormitory, Princeton University.

MASTER DRAFTSMEN SERIES—CHARLES Z. KLAUDER.



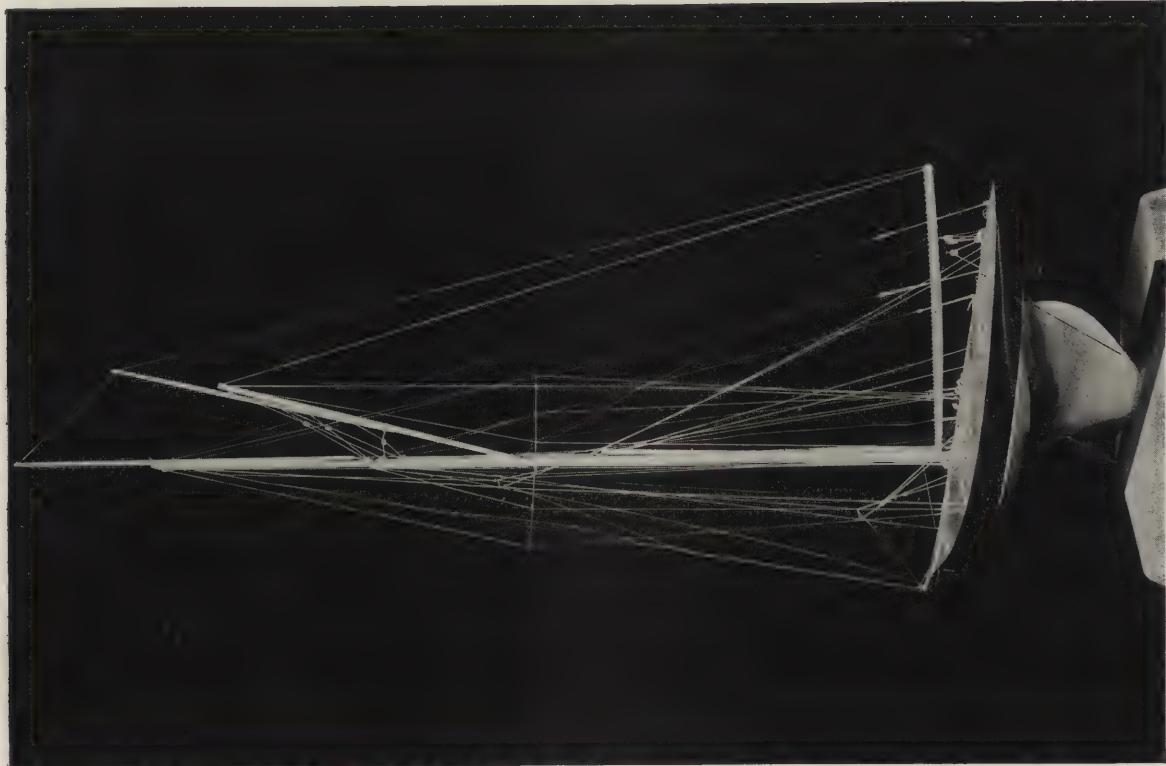
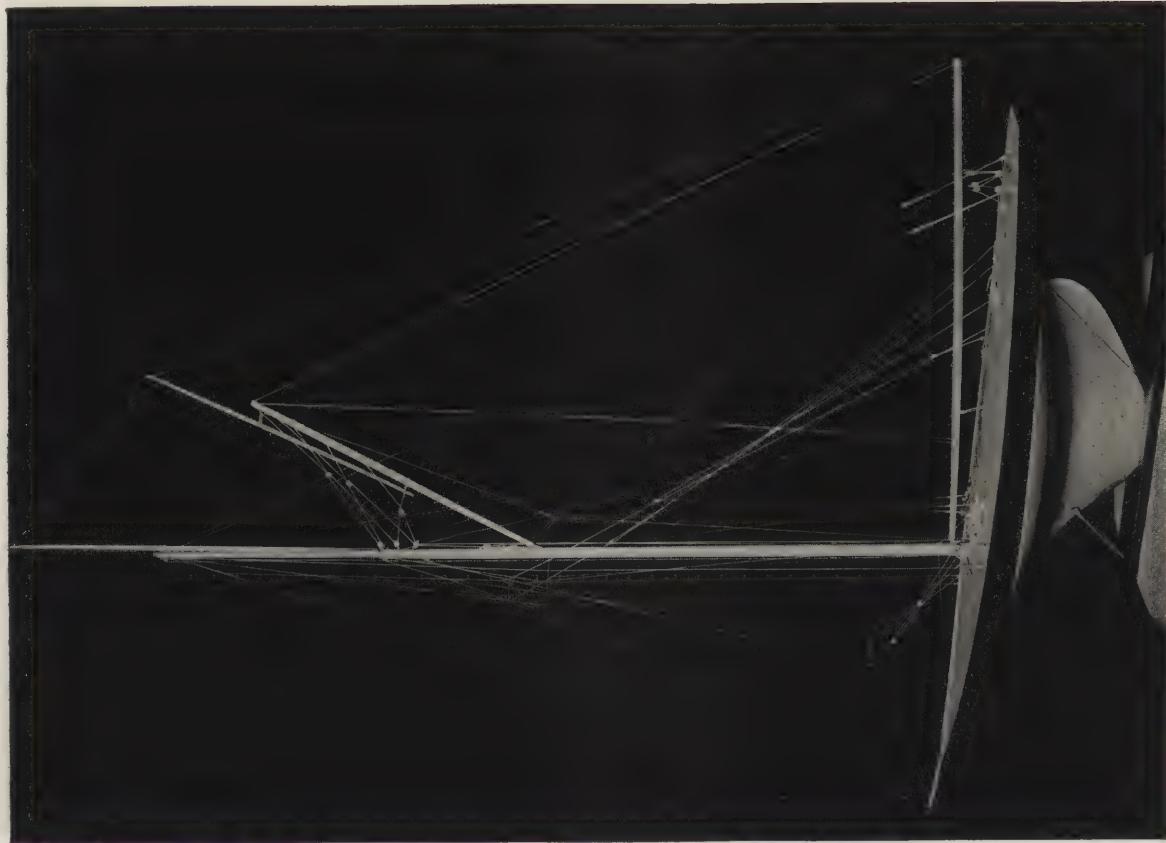
LITHOGRAPHIC CRAYON DRAWING ON LITHOGRAPHIC PAPER BY CHARLES Z. KLAUDER
Sketch, Segovia, Spain.

Lithographic Crayon on Lithographic Paper.
FANTASY BY CHARLES Z. KLAUDER



Red Crayon on Lithographic Paper.
SKETCH, CARCASSONNE, FRANCE, BY CHARLES Z. KLAUDER





YACHT MODEL DESIGNED AND BUILT BY CHARLES Z. KLAUDER

PENCIL POINTS



LITHOGRAPHIC CRAYON DRAWING ON LITHOGRAPHIC PAPER BY CHARLES Z. KLAUDER
Sketch, Granada, Spain.

MASTER DRAFTSMEN SERIES—CHARLES Z. KLAUDER.

(Continued from page 49)

ages," the re-entering angles in the corners of the tower at the top. They take away the unpleasant sharpness of the corners of a square-topped tower. They soften the effect. This drawing also shows how the corner piers will look, it gives an opportunity to study the triangular pinnacles introduced in the corners. The triangular form of these pinnacles is a happy thought, by the way, for a triangular pinnacle has much more variety and freedom of appearance than one having an even number of sides, because when seen from even slightly different points of view it is different in silhouette. All these things are studied in these perspective drawings and carried back to the plans and elevations, to be in turn created in the stone realization of the architect's

conception. In addition to these drawings on tracing vellum, most of which are in red crayon, there are in Mr. Klauder's office in Philadelphia renderings and sketches in various mediums, that show his wide range of treatment.

Preliminary crayon studies and a water color rendering of the design for the Cathedral of Learning at the University of Pittsburgh made by Mr. Klauder are reproduced on pages 46, 47 and 48 of this issue. Other selections of Mr. Klauder's work, which also demonstrate his mastery of draftsmanship and skill as a designer, include freely drawn sketches to demonstrate to his clients the finished appearance of their proposed buildings, water color renderings of various buildings and some lithographic crayon

(Continued on Page 60)



LITHOGRAPHIC CRAYON SKETCH BY CHARLES Z. KLAUDER
Stadium, University of Pennsylvania.

PENCIL POINTS



WATER COLOR SKETCH BY CHARLES Z. KLAUDER



WATER COLOR SKETCH, BERMUDA, BY CHARLES Z. KLAUDER

MASTER DRAFTSMEN SERIES—CHARLES Z. KLAUDER.



WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Holder Tower, Princeton University.

PENCIL POINTS

(Continued from page 57)

and water color sketches made while in Spain and France.

It is interesting to note that in the rendering of the "Stock Pavilion," for Pennsylvania State College shown on page 52, a type simplification is shown in the drawing corresponding to the design character of the building.

The sketches in lithographic crayon shown on pages 53 and 54 are masterly in the highest degree. On page 54, the lower illustration shows one of the most interesting drawings of all, a Fantasy.

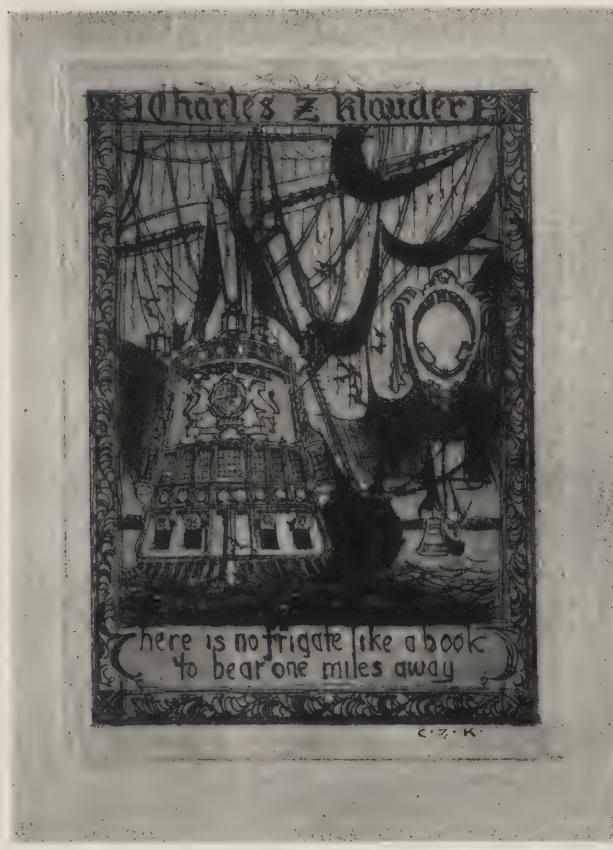
On page 56 is a strong sketch made at Granada, with lithographic crayon on lithographic paper, while on the opposite page is a powerful sketch study of

the Stadium of the University of Pennsylvania, done in the same medium.

The watercolor sketches reproduced on page 58 are notable for their tenderness combined with simplicity and strength.

One of Mr. Klauder's diversions is the designing and building of model yachts, one of which is illustrated on page 55. These models are beautifully and splendidly made, designed with scientific thoroughness and sail with remarkable speed. He may be seen in Central Park, New York, on Sunday mornings when the young and grown-ups gather to match their small craft on the park lake.

Keen intellectually, artistically sensitive, decisive and tolerant in character and simple in manner, Mr. Klauder's personality commands admiration as well as does his skill as a master draftsman.



Full Size Reproduction of
BOOK-PLATE ETCHING
BY CHARLES Z. KLAUDER

IOANNIS Y. AÑEZ
PARLADORII
IVRIS PERITI
IN REGIO VALLISOLETANO
PRÆTORIO ADVOCATI
RERVM QVOTIDIANARVM.
LIBRI DVO.

ET QVOTIDIANARVM DIFFERENTIARVM
Sesquicenturia, cui accesserunt eiusdem Authoris quæstiones
duodecimgenti viles, & necessariæ in foro
versantibus.

Cum Argumentis, Summarijs, Numeris, & Indice Capitum materiarum, & rerum
memorabilium locupletissimo.



VALLISOLETTI
ET PANORMI, Apud Ioannem Baptistam Muringum. M. DC. XXVIII.
Superiorum Permissu.

TITLE PAGE OF AN ITALIAN BOOK, PRINTED IN 1628
(Reduced to 5/6 of Original Size)

PLATE XLI

An early Seventeenth Century Italian title page with a copper plate embellishment, exhibiting a fine piece of typography. It is arranged in six sizes of roman capitals, combined with some striking lower case roman and also italic letters. The second, fourth, seventh, twelfth, thirteenth, fourteenth and sixteenth lines are printed in red. Typography is closely allied to the fine arts, and types have always reflected the taste or feeling of their time.

VOLUME VI, NUMBER 11



PENCIL DRAWING BY ERNEST D. ROTH
RIO TERRI, FRARI, VENICE.

PENCIL POINTS

PLATE XLII

On the other side of this sheet is reproduced one of the charming pencil sketches made by Ernest D. Roth in Venice. It shows the same freedom and ease of pencil work as the sketch reproduced in the plate section of the October issue and presents an equally interesting bit of Venice.

VOLUME VI, NUMBER 11



DRAWING BY WALTER B. CHAMBERS
MT. ST. MICHEL.

Mt. St. Michel
Sept 20 1889

PENCIL POINTS

PLATE XLIII

The effect of distance in the view through the arches and up the steps is especially well produced in the sketch by Walter B. Chambers which is printed on the other side of this sheet. The drawing is direct and clean, made on metallic paper which requires sureness of touch. It is one of the many sketches made by Mr. Chambers in 1889, on one of his study trips abroad.

VOLUME VI, NUMBER 11



Courtesy of H. C. Dickens

ETCHING BY LOUIS C. ROSENBERG
FEZ GATE, TANGERS.

PLATE XLIV

The etchings of scenes in Tangers made by Louis C. Rosenberg are remarkable not only for the success with which the expression of mass, line and texture in the architecture have been rendered but for the spirited and convincing representation of the life of the streets. In the spotting of light and dark these etchings are also effective.

VOLUME VI, NUMBER 11



The "House for Pharaoh's Daughter."

Rendering by Hugh Ferriss.

DR. JOHN WESLEY KELCHNER'S
**RESTORATION OF KING SOLOMON'S TEMPLE
AND CITADEL**

HELMLE AND CORBETT, Architects

A RESTORATION of King Solomon's Temple that bears evidence of authority has at last been made. Helmle and Corbett, Architects, have carried out the idea of John Wesley Kelchner, who, inspired by religious zeal has made the reconstruction of the Temple his chief object in life for over thirty years. Though drawings showing innumerable restorations are to be found in the architectural libraries, varying in character from an attempt at the Assyrian manner to a Gothic type, it is safe to say that never before has a restoration of this Temple been undertaken by competent and scholarly architects.

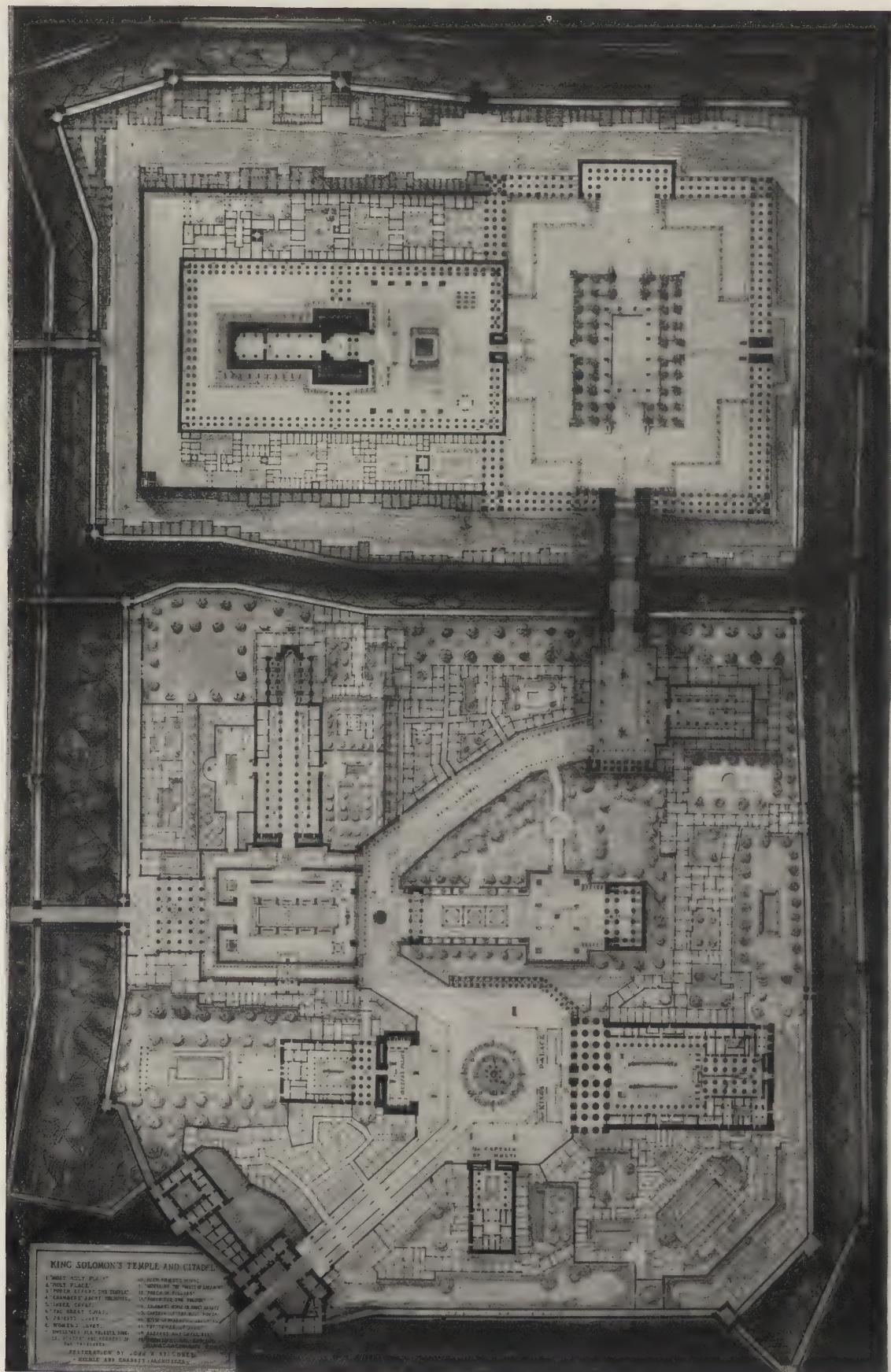
As a result of the research work and designing carried on by Helmle and Corbett during the past four years this restoration is now complete and it is splendidly shown in a large group of interesting drawings made by Birch Burdette Long, Hugh Ferriss, Talor Sears and others. Soon this restoration will be actually built as a part of the Sesquicenten-

nial International Exposition to be held in Philadelphia in commemoration of the one hundred and fiftieth anniversary of the signing of the Declaration of Independence. The opening date of the Exposition is June 1, 1926.

Visitors will be able to walk about the courts and to experience the sensation of having been carried back to King Solomon's time, for it is understood that life is to be given to this picture by pageantry illustrating the customs, dress and activities of that time. The Temple will be completely fitted and will have replicas of the great branched candlesticks, shewbread, the heavily jewelled priestly breast plates and of the vestments and other accessories. In the Most Holy Place, back of a mystic veil of blue, scarlet and purple, will rest a reproduction of the Ark of the Covenant, guarded by gigantic golden cherubim.

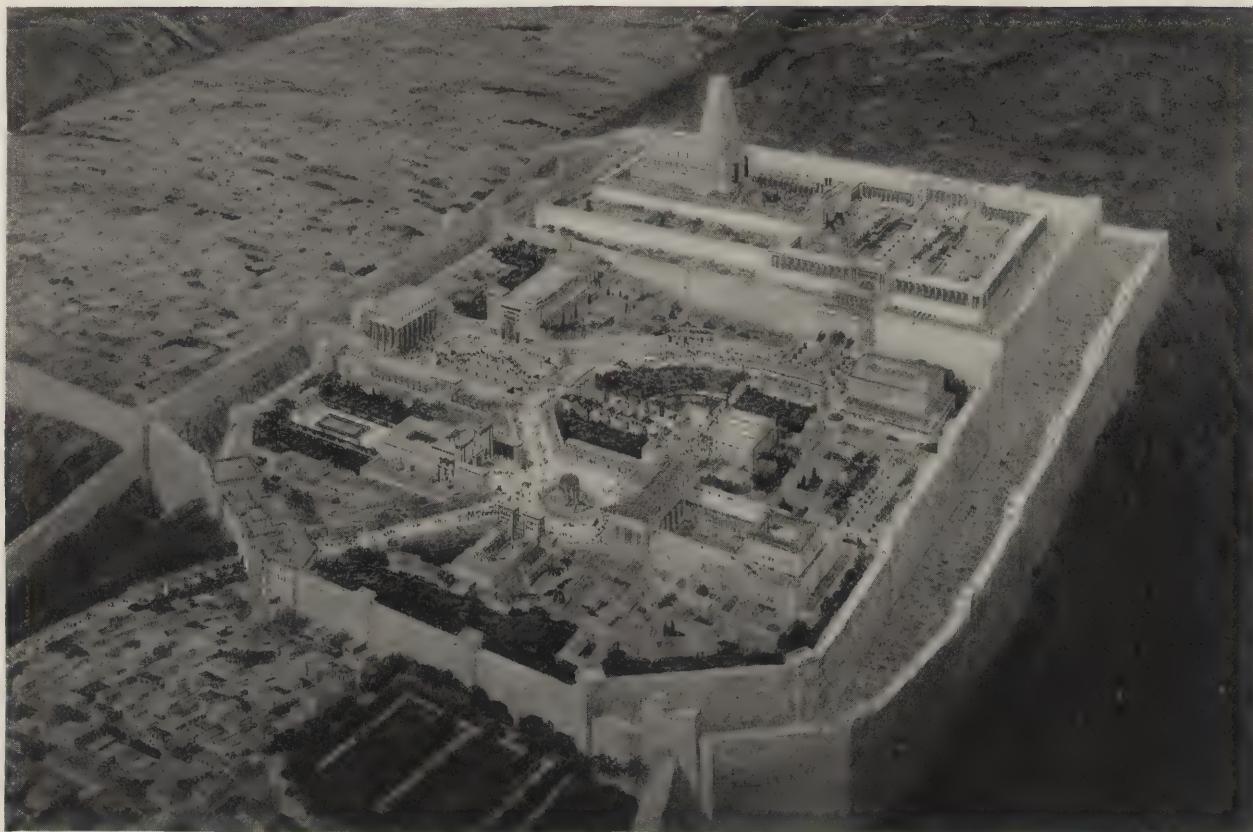
It is intended to incorporate in the structure a system of pipes through which, when the building is empty of visitors, it will be possible to force volumes

PENCIL POINTS



GROUND AND FIRST FLOOR PLAN OF KING SOLOMON'S TEMPLE AND CITADEL
RESTORATION BY DR. JOHN WESLEY KELCHNER HELMLE AND CORBETT, ARCHITECTS.

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



"BIRDS-EYE VIEW"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

RENDERING BY BIRCH BURDETTE LONG.

HELMLE AND CORBETT, ARCHITECTS

of gas which will envelope the structure to its full height presenting, in conjunction with other means, an impressive spectacle of the destruction of the Temple. When the clouds of gas drift away the structure will be found unharmed.

Broader than the architectural significance of this restoration will be its significance to the public, for it will mean the reconstruction of the great Temple which Solomon erected on the heights of Mount Moriah that the monotheistic principle of one God might be presented with as much majesty as possible to the multitudes of idolatrous believers in polytheism who constantly poured along the great trade route between the north and south through the city of Jerusalem. As we know, Solomon's Temple was built during the period of peace and prosperity which followed the turbulent days of war under King David and it is fitting that the reconstruction of the Temple at Philadelphia is to stand as a symbol of world peace to all who come to this International Exposition.

About five years ago Dr. Kelchner met Mr. Corbett and explained his idea for the reconstruction of King Solomon's Temple. Previous to that time he had spoken of it to many other architects who had not been able to visualize the possibilities. As a preparation for the realization of his dream Dr. Kelchner had taken up the study of Hebrew, Latin, Greek and modern languages in order that he might be able to study in the original what had been written regarding the Temple. He had also visited Pales-

tine and studied the site of the Temple and its surroundings.

Upon undertaking the work Mr. Corbett immediately set about making himself and the members of his organization who were to take part in this work thoroughly familiar with the available data on the Temple. To this end he sought the aid of William Bell Dinsmore, Associate Professor of Architecture and Librarian of Avery Library, Columbia University. Mr. Dinsmore prepared a complete list of books bearing on this subject and the study of these books and of other sources of information was pursued carefully and patiently. This, of course, in addition to the information supplied by Dr. Kelchner. Above all the Biblical description of Solomon's Temple was taken as the authority by which all other information and conjectures were checked and to which they were regarded as only supplementary. The architects have taken the position that the description of the Temple in the Bible is absolutely correct and accurate in every way.

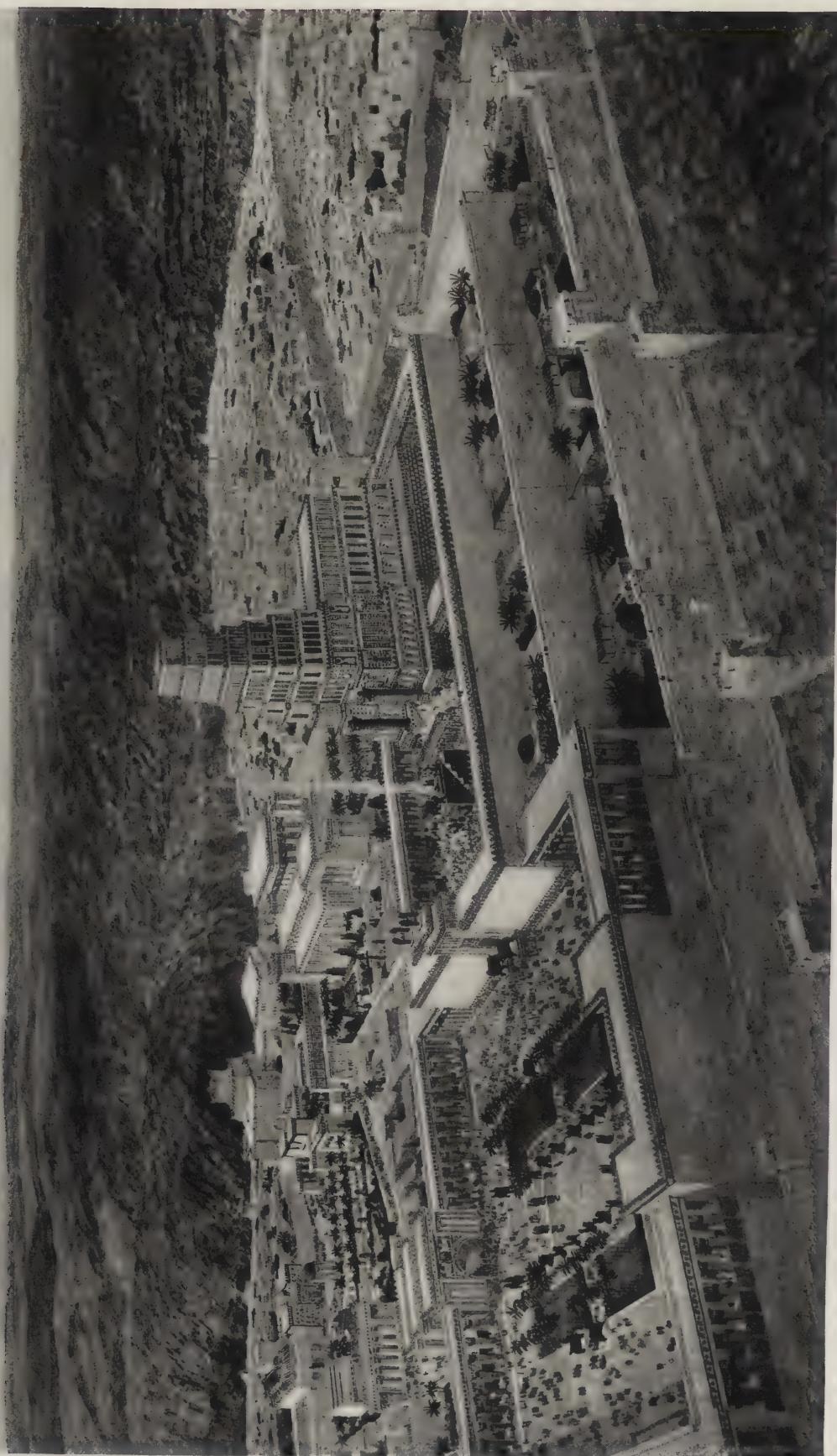
In studying this problem Mr. Corbett at the outset laid down clearly two basic principles: first, that in making this restoration the architects must proceed as the architect, or architects, of the Temple necessarily did, assuming the use of only such methods of construction and materials as were employed, or might have been employed, at that time and of such architectural forms as might have been employed. The only buildings to be studied for sug-

[Continued on page 76]



ISRAEL ENCAMPED ROUND-ABOUT THE TABERNACLE IN THE WILDERNESS OF SINAI.

Rendering by Birch Burdette Long.



KING SOLOMON'S TEMPLE AND CITADEL—VIEW FROM THE NORTH EAST CORNER.

RESTORATION BY DR. JOHN W. KELCHNER

Rendering by Birch Burdette Long.

HELMLE AND CORBETT, ARCHITECTS.

PENCIL POINTS



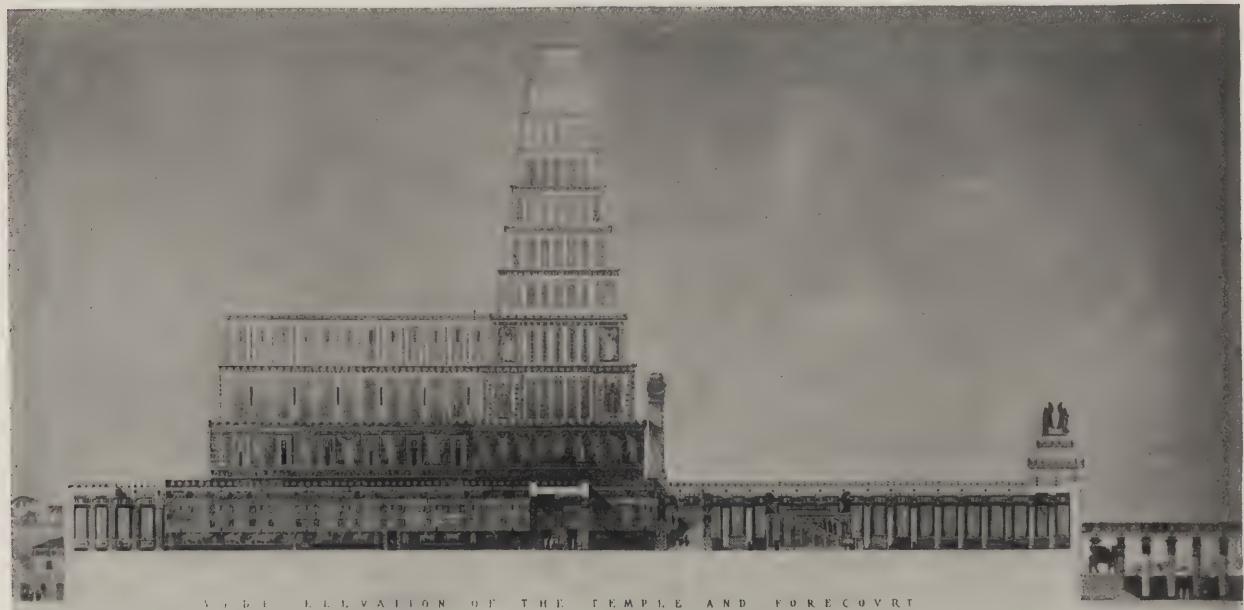
LONGITUDINAL SECTION THRU THE TEMPLE AND FORECOURT

Longitudinal Section Thru The Temple and Forecourt.

RESTORATION OF KING SOLOMON'S TEMPLE.

RESTORATION BY DR. JOHN WESLEY KELCHNER

HELMLE AND CORBETT, ARCHITECTS.



VERTICAL ELEVATION OF THE TEMPLE AND FORECOURT

RESTORATION OF KING SOLOMON'S TEMPLE BY JOHN WESLEY KELCHNER.
HELMLE AND CORBETT ARCHITECTS, NEW YORK CITY.

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



FRONT ELEVATION

RESTORATION OF KING SOLOMON'S TEMPLE.
BY JOHN WESLEY KELCHNER
HELMLE AND CORBETT ARCHITECTS, NEW YORK CITY.

PENCIL POINTS

[Continued from page 71]

gestions were, therefore, those built previous to the building of the Temple. The second principle was that the site must be assumed to be in the condition which existed at the time the Temple was built, not in its present condition. In this connection it is important to note that many, if not all others, who have designed restorations of the Temple have overlooked this point. Mr. Corbett could not believe that the present condition of the site was that at the time King Solomon's Temple was erected. The present flat ground pointed out as the site did not correspond with the description of the location of the Temple, with the natural impulse to place so important a building of this character on a piece of high land or with the general hilly contour of the terrain in general. Consequently he made investigations and discovered that in the course of centuries a valley had been filled in and that at the time the Temple was built the site now pointed out was high land rising abruptly from its surroundings,—the kind of situation one would naturally expect would be chosen for the building.

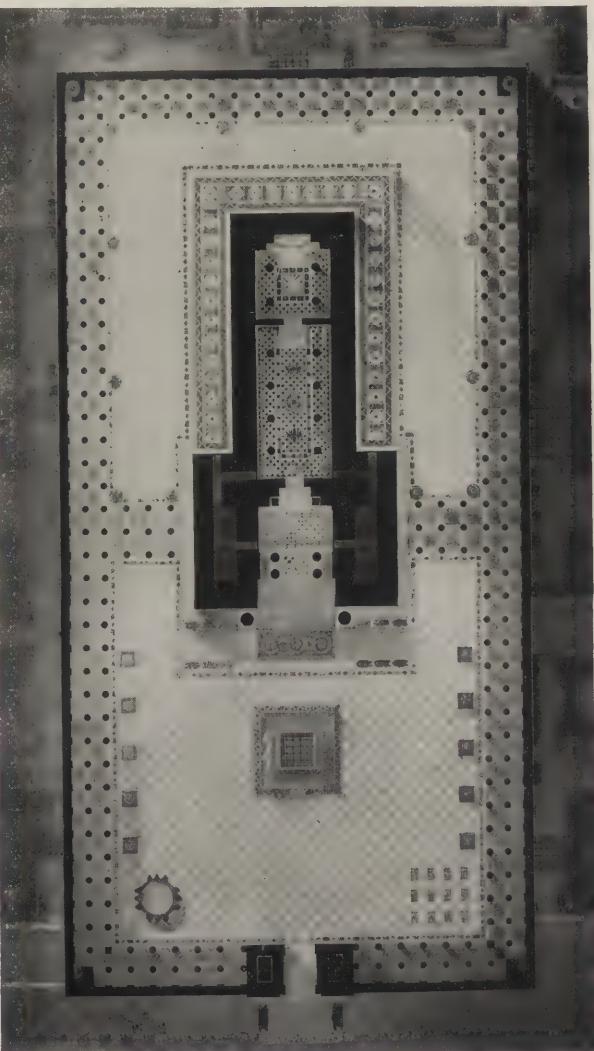
In proceeding with the work of designing, the first care was the study of the plans and their designing in conformity with the methods of construction employed at the time when the Temple was built. The materials affecting the thickness and the height of walls, the spacing of supports for beams and innumerable other matters which have a controlling influence upon the plan are

necessarily reflected in the plans and in the design of the elevations. For instance, The Most Holy Place is described in the Bible as a room the dimensions of which, translated into our system of measure, are 80 ft. long, 40 ft. wide and 20 ft. high. With ceiling beams carried across the shorter dimension: there would be a span of 40 ft. which, for wooden beams, is, of course, impracticable. The solution of this difficulty was the use of a row of columns along each side within the room, reducing the greatest span to a proper length. This is a method of construction

in conformity with the practice of the times and for which there is ample authority. The fact that these rows of columns are not mentioned in the Biblical description of the room may be accounted for on the ground that they were customary details of such construction, that their presence was taken for granted. It is safe to assume that if rows of columns had not been used in this way the fact would have been mentioned in the Biblical description, for the remarkable

clear span of 40 ft. would have been one of the outstanding features which the author would surely not have failed to draw attention to.

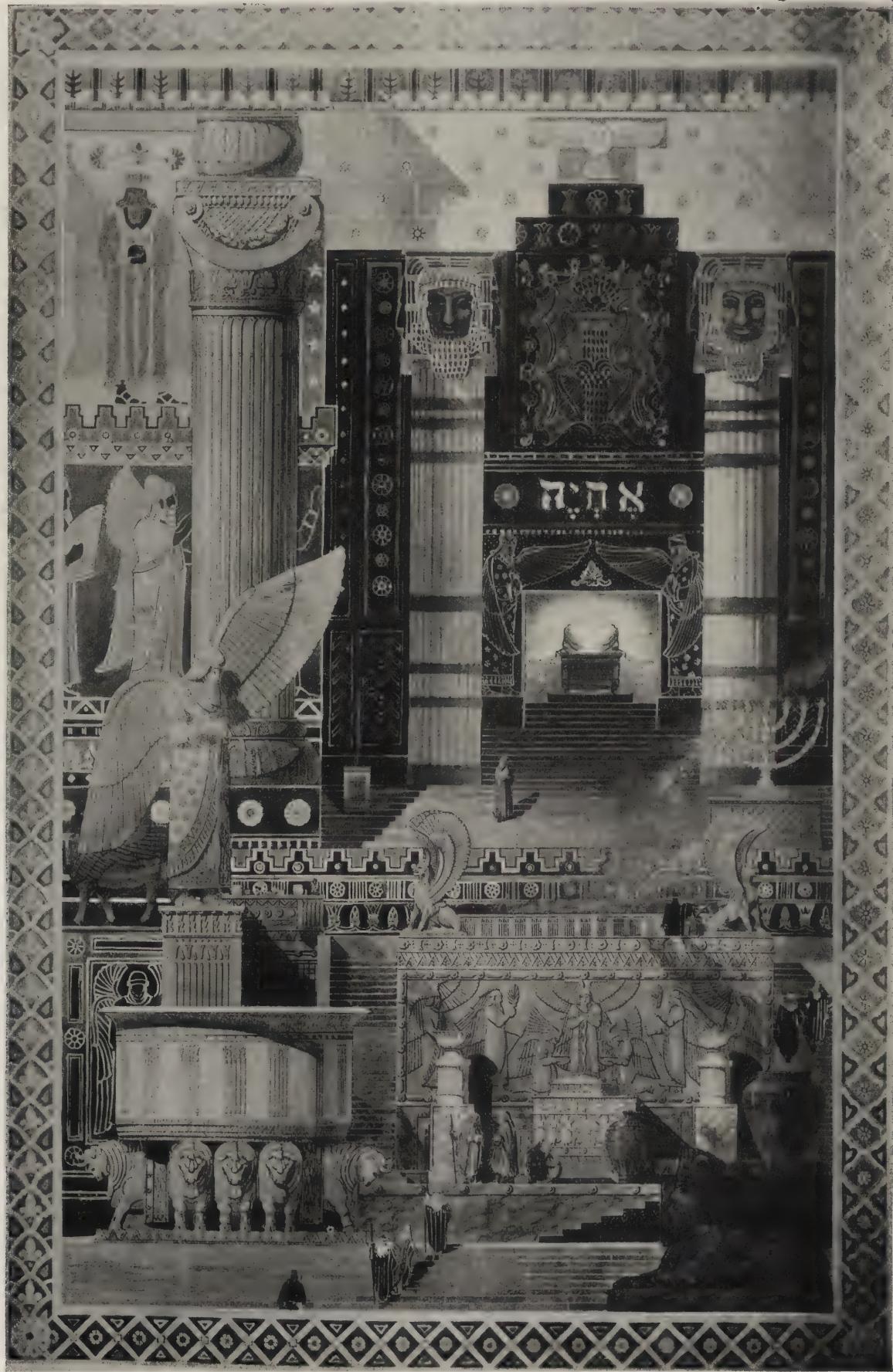
In the matter of design character Solomon's Temple showed a comingling of styles current at the time of its building and previous to that time, for Jerusalem was the gateway through which much of the traffic of the then-known world passed. Multitudes of traders must have traversed King Solomon's country and the inhabitants derived a large part of their income for services rendered to these traders, including protection of caravans against marauders. Unquestionably the treasury was largely enriched by the levying of tribute for the privilege of passing through the country. David had made the position of Jerusalem a powerful one among the nations and the tribute Solomon was able to command was rich. This importance of Jerusalem made available for the building of the Temple a widely varied supply of materials while his close relations with the rulers of other kingdoms enabled Solomon to make



GROUND FLOOR PLAN
RESTORATION OF KING SOLOMON'S TEMPLE.
Helmle & Corbett, Architects

use of the most skilled artisans and designers of other nations. It will be recalled that Solomon obtained cedar wood for the building of the interior from King Hiram of Tyre who supplied cedar of Lebanon in exchange for material needed by the Phoenician King of Tyre. The Egyptian influence was also particularly strong because of Solomon's alliance with the court of Egypt through his marriage with a princess of the Egyptians. It may be mentioned in passing that one of the most inter-

[Continued on page 86]



DETAILS OF THE RESTORATION OF KING SOLOMON'S TEMPLE.

RESTORATION BY DR. JOHN WESLEY KELCHNER

HELMLE AND CORBETT, ARCHITECTS.

PENCIL POINTS



THE GREAT PORCH OF THE RESTORATION OF KING SOLOMON'S TEMPLE.

RENDERING BY HUGH FERRISS

HELMLE AND CORBETT, ARCHITECTS.

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



THE RESTORATION OF KING SOLOMON'S TEMPLE—SCENE AT NIGHT.

RENDERING BY HUGH FERRISS

HELMLE AND CORBETT, ARCHITECTS.



INTERIOR—KING SOLOMON'S PALACE—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS
HEMLE AND CORBETT, ARCHITECTS.



"PORCH OF PILLARS"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

HELMLE AND CORBETT, ARCHITECTS.

RENDERING BY HUGH FERRISS



"PORCH OF JUDGMENT"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

HEMLE AND CORBETT, ARCHITECTS.

RENDERING BY HUGH FERRISS

INTERIOR—"HOUSE OF THE FOREST OF LEBANON"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS
HEMLE AND CORBETT, ARCHITECTS.



PENCIL POINTS



KING SOLOMON'S PALACE—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS
HELMLE AND CORBETT, ARCHITECTS.

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



THE GATE TO THE "INNER COURT"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS

HELMLE AND CORBETT, ARCHITECTS.



EXTERIOR—"THE HOUSE OF THE FOREST OF LEBANON."

RENDERING BY HUGH FERRISS

HEMLE AND CORBETT, ARCHITECTS

esting features of the reconstruction at Philadelphia will be the rebuilding of the palace, adjoining the temple grounds, which the King built for his Egyptian wife.

The entire Citadel of Jerusalem will be reconstructed at Philadelphia embracing, besides the Temple, King Solomon's Palace, "The House of the Forest of Lebanon", "The Queen's Palace", "Porch of the Pillars", and other structures. The entire Cita-

del was enclosed within military walls which began at the bottom of the mount. The large court will be 400 ft. by 200 ft. beyond which, within its terraced court on a higher level, will be the impressive pile formed by The Holy Place, The Most Holy Place, and The Great Porch. The latter will rise 300 ft. in white and gold against the sky as a step back tower of majestic effectiveness.

EUGENE CLUTE.



Dr. Kelchner's Model of the Tabernacle of Israel.

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NOVEMBER, 1925

THE AMERICAN ACADEMY IN ROME.

AT A meeting of the Board of Trustees of the American Academy in Rome held on October 6th, John Russell Pope was elected a Trustee of the Academy as successor to the late Breck Trowbridge. Mr. Pope was the first man to win a Fellowship (in 1895) at the American Academy in Rome, then the "American School of Architecture." He is one of the most distinguished alumni of the American Academy.

Henri G. Marceau has completed his three-year term as Fellow in architecture at the Academy and returned to this country to take a position to teach architecture in the University of Pennsylvania.

The other Fellows in the fine arts to complete their terms this year are Alfred E. Floegel, painter, Lawrence T. Stevens, sculptor, and Randall Thompson, composer.

The newly-appointed Fellows, five in number, sailed from New York, Sept. 22d, to begin their work at the Academy about October 1st. The Trustees and Alumni Association gave a dinner in their honor at the Century Club on the evening before they sailed.

Professors Charles R. Morey and B. L. Ullman will be the new classical professors at the Academy this year, and W. Symmes Richardson, of the firm of McKim, Mead & White, will be Annual Professor in Fine Arts. Mr. Richardson has purchased a villa for a home adjoining the Academy property on the Janiculum Hill in Rome.

The annual appointments to Fellowships in 1926 will again include a Fellow in landscape architecture; this appointment is made only once every three years.

A. Phimister Proctor, the famous animal-sculptor, will occupy a studio at the Academy in Rome this year, working on an important commission.

THUMB TACK CLUB OF DETROIT.

THE FIFTH Annual Architectural Exhibition of the Thumb Tack Club of Detroit will be held in the Galleries of the Institute of Arts from November 11th to 26th. The exhibition is not local in any sense as it will include the work of the leading architects throughout the country.

COMPETITION FOR HOUSE BEAUTIFUL COVER DESIGNS.

THE HOUSE BEAUTIFUL Cover Competition has been an annual event now for the past three years. The announcement of the Fourth Competition contains an addition to the usual quota of prizes. The First Prize is \$500, the Second Prize, \$250. In addition to these, this year, and in addition also to the possible purchase price of a design, is offered a Special Prize of \$100 with a Certificate of Merit, for the best design submitted by a student of any School of Art. The Competition closes January 29th, 1926. Full particulars regarding it may be obtained from the Competition Committee, *House Beautiful*, 8 Arlington Street, Boston, Mass.

PRODUCERS' RESEARCH COUNCIL TO MEET.

THE SEMI-ANNUAL meeting of The Producers' Research Council, Affiliated with the American Institute of Architects, will be held in Chicago on November 10th and 11th at the Club House of the Chicago Chapter, A.I.A.

The meeting will be addressed by Mr. N. Max Dunning, Technical Director of the Scientific Research Department A.I.A.; Mr. Harry Wheelock, President of the Chicago Chapter, A.I.A.; and Mr. Charles E. Fox, President of the Illinois Society of Architects.

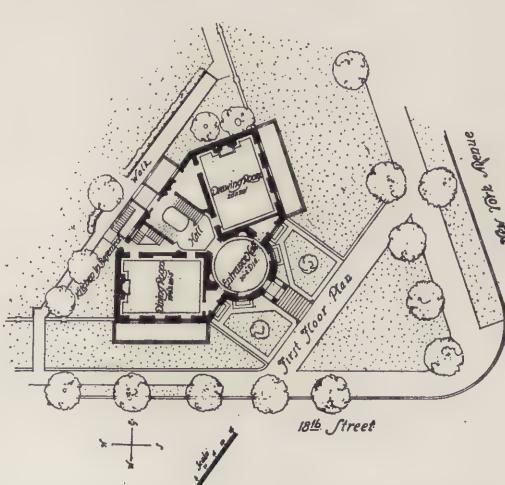
A cordial invitation is extended to all architects to attend all sessions of the meeting.

THE T SQUARE CLUB OF PHILADELPHIA.

AT OUR Annual meeting the T-Square Club enacted certain amendments to the By-Laws where-by we now have a Titular President and a First and Second Vice-President. This is quite a departure but one which links the Club with the Philadelphia Chapter in just one more way in addition to its former ties. At the present time a definite active program is rapidly forming which is likely to further tie the University of Pennsylvania to the activities of the T-Square Club.

We feel, as members of the T-Square Club, a peculiar cooperation with the Philadelphia Chapter, A.I.A., and the University of Pennsylvania in that we endeavor to carry on the old precedents of the T-Square Club, forming a sort of "training school" from which the University draws many students and The Philadelphia Chapter members obtain many trained and experienced draftsmen. In addition to this we have in our daily GRUB CLUB a place where Architects, Draftsmen and Atelier Men come together in an association which is too important and subtle to describe.

The T-Square Club officers for 1925-1926 are as follows: President, Paul P. Cret; First Vice-President, Walter Antrim; Second Vice-President, Roy F. Larson; Secretary, Louis E. McAllister; Treasurer, Roy W. Banwell.



FIRST FLOOR PLAN, THE OCTAGON HOUSE
(See page 89 for announcement of Competition)

PENCIL POINTS



OTTO JOHN TEEGEN

OTTO JOHN TEEGEN has been awarded the Julia Amory Appleton Fellowship by Harvard School of Architecture. This scholarship is granted every other year and entitles the holder to one and one half year's study abroad.

Mr. Teegeen was born at Davenport, Iowa, and attended school there. He entered Harvard College and was graduated from the College of Fine Arts with distinction, and later from the Graduate School of Architecture. He is a member of Phi Beta Kappa and for the past year has been in the office of Schultz & Weaver, Architects, New York. Mr. Teegeen sailed for Europe last month and plans to spend part of his time at the American Academy in Rome. He wishes to express his appreciation to Professor Jean Jacques Haffner, of Harvard, for his help and interest.

THE NEW YORK ARCHITECTURAL CLUB, INC.

The Architectural Bowling League Section

THIS really ought to be entitled despatch No. 6½ or whatever it is that the War Correspondents call such things, for we have just returned from the battle front at Thum's Alleys, where we have witnessed, from the safe vantage of neutrality on this, our night off from hostilities, the third skirmish in this terrible war for supremacy in the bowling race. We would certainly give it such a title, if it weren't that we lack a list of casualties, and we understand that that is absolutely essential with war scribes.

We are sorely tempted to crib the slogan of a famous American entertainer and call it the "Greatest Show on Earth," but on second thought, we feel that that would be too modest. For you see, old P. T. B., talented though he was in such things, never was able to put on a show in which the participating characters naturally registered hope, fear, disappointment, disgust or radiated contagious smiles of pleasant satisfaction in quick succession and all inside of five seconds of time. Not to mention the pushing, tugging and pulling, gymnastics, contortions and acrobatics performed behind the foul line. We are speaking of your true bowling enthusiast in action. It surely is a treat for sore eyes.

Incidentally, we are seriously considering the introduction of a resolution to bar all bosses and employers from the scene of strife. We have grave fears that, should they

observe too often the amount of energy and labor exerted by the men on the alleys, that they would effect radical reforms in the drafting rooms, and that would be calamity incalculable. The ruling might be ineffective at that. The aforementioned bosses and employers might shuffle in on us disguised as draftsmen.

It was "Ladies' Night" on the alleys (bless 'em all) and a good number of the fair sex honored and cheered us with their presence. Under compulsion we might admit that our vision may have been slightly blurred, but we are almost positive we counted between 40 and 50 heads, and all pretty is what we mean. Mr. Henry G. Poll was chairman of the festivities and with the able assistance of Messrs. Emil Capel, Paddy Lynch and Don Campbell, he carried things through as proudly as a Major-General. If it weren't for the difference in rank, we would say as proudly as a top sergeant. Everyone knows that no mere General has it on a top-kicker for snap and pride.

Alleys No. 9, 10 and 11 were reserved exclusively for the use of the ladies, on which an impromptu tournament was arranged, with three prizes to be tourneyed for.

Mrs. Corry won first prize, a handsome silk umbrella, with the tidy score of 134. Just out of mere curiosity, we stepped over to one of the other alleys, where Mr. Pat Corry was bowling on the Warren & Wetmore team, and we were shocked with surprise to see that he had just finished a game with a score of 98. Pat must have been considerably chagrined himself, because he turned right around and doubled his score in the next game. We earnestly hope that no serious dissension of superiority disturbed the tranquility of the Corry family as a result.

Miss Hauman won the second prize, which was a box of fine chocolates, and which we hope she enjoyed. We know that they were fine, because we had the pleasure of being among the very first to sample them.

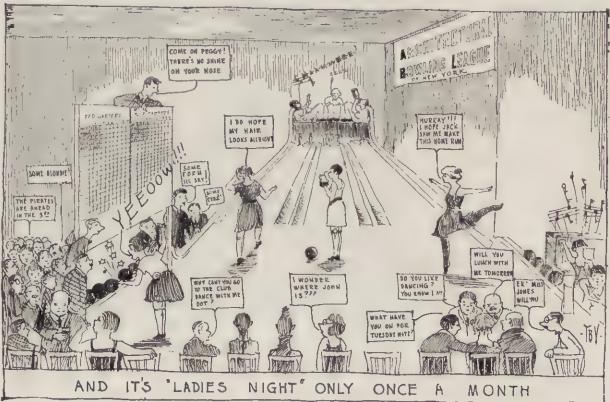
The third prize, a set of ten-pins, 3 inches high, was captured by Miss James, which makes it advisable for the other ladies to look to their laurels in the future.

The West End Ladies' Trio of radio fame entertained the contestants with appropriate music, and combined with the refreshments provided for the occasion, a good time was had by all. Yes, sir, we repeat, Henry did himself proud. He was just elected Treasurer of the league, and perhaps that had something to do with it. We wonder what he could do if we gave him the treasury.

Thursday, October 8th, was presentation day on the alleys, upon which occasion the retiring officers of the league were presented with handsome gold watches, in appreciation of their unselfish and untiring efforts. They were Messrs. Joseph A. Finegan, Norman T. Valentine, Henry G. Poll and H. R. Hutchinson.

It is too early at this writing to give the standing of the teams, but one thing seems certain, and that is that no team has a walkaway. It's give and take all the way. We will publish the standing of the teams in the next number, perhaps accompanied by more interesting cartooning by our own "Art Staff".

HENRY SASCH,
Secretary.



Cartoon By the "Art Staff" of the Architectural Bowling League.

PENCIL POINTS



THE NATIONAL HEADQUARTERS OF THE AMERICAN INSTITUTE OF ARCHITECTS, WASHINGTON, D. C.

The Octagon House, Dr. Wm. Thornton, Architect, 1761-1828.

ANNOUNCEMENT OF NEW COMPETITION FOR THE OCTAGON HOUSE INSCRIPTION

EARLY in the year prizes were offered in a competition which closed April 1, 1925. It was expected that awards would be made at the Exhibition in connection with the 58th Convention in April. The Jury, of which Mr. Howard Van Doren Shaw acted as Chairman, reported that none of the designs submitted were suitable for the purpose and the Jury decided to make no awards. This result was a disappointment to the undersigned as it must have been to those who sent in drawings. Most of the designs submitted were too ornamental and out of scale with the building, while others were not in keeping with the dignity of the building.

A new competition is hereby announced and those who have made studies are urged to revise them or make new ones for submission. Entry, of course, is free and additional copies of the program may be had on application to The Octagon House, Washington, D. C.

The Building Committee desires through a competition to secure a design for a tablet, sign, or historical device which will be dignified and refined and at the same time sufficiently conspicuous to attract the attention of the passerby. The purpose is to inform the public as to the historic and architectural importance of the building.

The following inscription is suggested:

The Octagon House
Erected in 1800
Occupied by President Madison when
the White House burned in 1814.
The Treaty of Ghent was ratified here.
Headquarters of
The American Institute of Architects

The inscription may be varied at the pleasure of the competitors.

It is suggested that the memorial device take the form of a wall tablet to be fastened to the building, or an inscription in individual bronze letters let into a stone or granite sidewalk leading to the front entrance, or a sign on a pole or standard. Each competitor is at liberty to follow any idea of his own or to suggest an alternative.

Competition is open to all architects and draftsmen.

Drawings should not exceed 24" x 36".

Rendering and scale at option of competitor.

Drawings shall be delivered anonymously to D. Everett Waid, 1 Madison Avenue, New York, N. Y., on or before January 1, 1926, with the name and address of the competitor enclosed in a plain sealed envelope.

Prizes will be awarded by the Building Committee as follows:

First Prize	\$150
Second Prize	100
Third Prize	50

The Jury reserves the right to withhold any prize if in their opinion an award is not deserved.

The Building Committee shall have the option of using any designs or suggestions upon according due credit to the authors.

Signed, THE BUILDING COMMITTEE

Frederick L. Ackerman	Robert D. Kohn
Grosvenor Atterbury	O. J. Lorehn
William P. Barney	E. P. Mellon
Edwin Bergstrom	Charles A. Platt
Glenn Brown	H. W. Sellers
D. H. Burnham	Howard Van Doren Shaw
J. E. R. Carpenter	A. H. Stem
E. W. Donn, Jr.	Seth J. Temple
Albert Kahn	Jos. Van Vleck
Wm. M. Kendall	A. M. Welch
Fiske Kimball	D. Everett Waid,

Chairman.

PENCIL POINTS



THEODORUS HOFMEISTER

WINNER OF TRAVELING SCHOLARSHIP

CHICAGO is already training its architects of the future who will design the magnificent passenger stations of the airplane lines that are to carry travelers to all parts of the globe.

Viewing the future populous highways of the air, and the world port that will be established here, the Architectural Sketch Club of Chicago assigned the "Airport Station" as the year's subject of its annual open competition for the Foreign Traveling Scholarship.

The prize winner, Theodorus Hofmeister, 27 years old, first of the twelve competing student architects, has designed an airplane station adapted to modern air travel.

For his work he is now possessor of the \$1,000 prize that gives him the privilege of a year's travel in Europe.

He will start on his trip early this fall. The winter will be spent in studying under Dutch architects in Amsterdam, Holland, where he was born.

Then as the weather moderates Mr. Hofmeister will begin with northern France and gradually pursue his way southward to Italy, where he plans to remain for some time.

THE BOSTON ARCHITECTURAL CLUB.

THE Boston Architectural Club, one of the oldest architectural organizations in the country, remains today practically unique in the work that it does for the younger men of the profession.

The character of the Club work is attested to, this year, by the fact that three of its men have won distinction within the last few months.

Edward F. Allodi is just taking up his work at Princeton as winner of the Princeton Architectural Scholarship for 1925-1926. He writes that he owes everything "to those men who have made possible the class work of the Boston Architectural Club—and also to those among my employers who have encouraged and aided me in the pursuance of my architectural ambitions."

This tribute will help to hearten the officers of the Club to continue their efforts unflaggingly!

Allodi was born in Palermo, Italy, in 1902. His schooling was in the Boston public schools, elementary and high. He began work in 1917 in the office of Edward F. Stevens of Boston. In 1918 he joined the Club and took courses in design, life drawing, and construction. Meanwhile he has had experience in some of the best offices in the city.

Another Club boy, Walter F. Bogner, has had the distinction of winning the coveted Rotch Travelling Scholarship. It is the oldest architectural scholarship in America, this being the fortieth year in which an award has been made. The scholarship provides for two years of travel abroad.

Bogner, born in Rhode Island, lived during his school years in Bohemia. Later he returned to the United States and in 1922 came to Boston and studied in the Boston Architectural Club atelier, while working in an architect's office daytimes. He is thoroughly an artist and finds highest joy in the work of his profession and most stimulating recreation in the enjoyment of music. Even while in the heat of his competition he went repeatedly to the Symphony for relaxation and exhilaration.

A third member of the Club who has just achieved distinction is Edward D. Stone, winner of the special student scholarship at Harvard for 1925-26. After graduating from the University of Arkansas in 1922, he entered the office of Strickland, Blodgett & Law, in Boston, and later has been employed by Coolidge, Shepley, Bulfinch & Abbott. During the last three years he has attended the courses in design offered by the Boston Architectural Club.

The atelier of the Boston Architectural Club in which these men were trained, is described by Prof. Haffner of the Department of Architecture at Harvard, as "the only place in America where the spirit of the ateliers of the *Ecole des Beaux Arts* is duplicated." It is certain that peculiar benefits derive from the form of organization existing at the Boston Architectural Club. The Club is managed entirely by the members, a majority of whom are draftsmen, and who determine the policies of the Club,—social, educational and financial.

The atelier is self-governed and has developed a spirit and a tradition which may well have elicited from Prof. Haffner the words of enthusiastic encomium quoted above. For some years the work of this atelier has been related to that of Harvard University and the Massachusetts Institute of Technology through the "conjunctive problems" in which the drawings have been jointly exhibited and premiated, and have reflected great credit upon the members of the Club atelier.

Financially the Club has had a unique career. With annual dues that have but recently been raised to \$15.00 it has had the fee of a very valuable piece of real estate, on the coveted top of Beacon Hill, in the very shadow of the State House. Here the members are served a luncheon every workaday noon of the year, and here in the Great Hall, of a winter evening, they hold their masques and revels, or dine and toast the newly announced winners of the "Rotch" and the various other prizes.



WALTER F. BOGNER.

PENCIL POINTS

THE INDIANAPOLIS ARCHITECTURAL CLUB

THE Indianapolis Architectural Club announces the results of a recent competition in which architectural books and portfolios were given as prizes. The winners are as follows:

FIRST PLACE

Joseph D. Small Frederick Wallick, archt.
308 Hume-Mansur Bldg.
Indianapolis, Ind.

SECOND PLACE

Max Winchel Pierre & Wright,
1133 Hume-Mansur Bldg.
Indianapolis, Ind.

THIRD PLACE

Lois Ellyn McCrary Pierre & Wright,
1133 Hume-Mansur Bldg.
Indianapolis, Ind.

MENTION

N. A. Owings.
Leslie F. Ayres.

The Club also announces the following program of Fall activities:—

TUESDAY NOON MEETINGS

- Nov. 3—Grier Shotwell.
- Nov. 10—Clyde Stoughton—"Photography"
- Nov. 17—Leslie Colvin—"Criticisms from a Contractor."
- Nov. 24—B'd of Fire Underwriters—"How an Architect may use them."
- Nov. 31—Emerson Chaillé—A Realtor's criticism of an Architect"

BANQUETS

- Nov. 19—Edgar Hunter—"What an Arch't sees on a pleasure trip around the world."



EDWARD D. STONE.



EDWARD F. ALLODI.

SAINT LOUIS ARCHITECTURAL CLUB.

THE FIRST regular meeting of the St. Louis Architectural Club for the season 1925-26 was held on Thursday evening, October 1st, at the Clubhouse, 514 Culver Way. The affair was in the nature of a smoker, and the speaker for the evening was Dr. W. C. Bitting, recently retired pastor of the Second Baptist Church in St. Louis. His talk was informal, dealing with his philosophy of life in general, his activities in the field of archaeology, and finally his experience with architects, notably in connection with the building of the present home of the Second Baptist Church on Kingshighway from Washington to McPherson Avenue.

This building was erected eighteen years ago, two years after Dr. Bitting's acceptance of the pastorate. It is perhaps the best example in the United States of the Italian Gothic Style of architecture and for many years has been a favorite subject for sketches with all the students of architecture in St. Louis. The architects for this church were Mauran, Russell & Garden of St. Louis. Equally as interesting as the design of the building is the combination of building materials,—dull colored terra cotta, brick of five different shades ranging from browns to yellows, and dull red tiles on the roof. Interesting iron grilles and tie rods are other features, and most beautiful of all is the enclosed garden with its pool of water which reflects the campanile.

The evening school maintained by the Club opened its classes on October 2nd, with eighty-five students enrolled. Courses are given in Elementary, Intermediate and Advanced Design, Shades and Shadows, Perspective, Free-Hand Drawing, History of Architecture, and in Construction. The evening school is affiliated with the day school maintained at Washington University.

PRATT INSTITUTE ALUMNI

PRATT Institute Alumni Architects meet for luncheon on Tuesdays at twelve thirty, at the Fraternity Clubs Building, 22 East 38th St. Every P. I. Alumni Architect welcomed. Plans are being made for an evening get-together. For particulars write E. S. Anderson, 713 West 175th St., New York.

PENCIL POINTS

PERSONALS

D. WENTWORTH WRIGHT has opened an office for the practice of architecture at 9 Highland Place, Maplewood, N. J., where he will specialize in residential work.

FRANKLIN COX STANTON has opened an office for the general practice of architecture in the Capital National Bank Bldg., Olympia, Washington.

JERRY LOEGL AND NORMAN J. SCHLOSSMAN, Architects, have formed the organization of Jerry Loegl and Norman J. Schlossman, Architects, with offices at 612 No. Michigan Boulevard, Chicago, Ill.

THOMAS E. HIBBEN is now associated with Robert Frost Daggett for the practice of architecture under the name of Daggett and Hibben, Architects, 920 Continental Bank Bldg., Indianapolis, Ind.

ISIDOR RICHMOND, Architect, has opened an office at 248 Boylston St., Boston, Mass.

JAMES S. ANGUS MERCER retired from the New York State Department of Architecture on September 1st after many years of service.

RONALD W. CATTO AND DOUGLAS E. CATTO, formerly associated under the firm name of Ronald W. Catto, Registered Architect, have formed a partnership under the firm name of Catto and Catto, Architects, with offices at Brock Chambers, Toronto 2, Ontario.

LEWIS H. RUSSELL, ARCHITECT, has removed his office to 300 Taylor St., Chevy Chase, Md.

ELMO C. LOWE has retired from the firm of Granger, Lowe & Bollenbacher, Architects, and has opened an office to continue the practice of Architecture under his own name at 636 Church St., Evanston, Ill.

LOUIS A. BROWN, JR., announces the opening of an office at 28 Castleton Park, St. George, S. I., where he will conduct a complete architectural drafting service.

Anyone knowing of the whereabouts of Mr. Charles Deas who formerly practiced architecture in Memphis, Tenn., is requested to aid us in locating him.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

(Other items on pages 103 and 104)

Contractor's Atlas.—Periodical issued in the interests of architects and builders. The July-August number contains an interesting article on the Eastern Hills Reservoir, Cincinnati, with drawings, principles of design and construction, etc. Atlas Portland Cement Co., 25 Broadway, New York City.

Tapestry Brickwork.—Brochure illustrated in color containing both exterior and interior treatment. 48 pp. 8 x 11. Fiske & Co., 25 Arch St., Boston, Mass.

Flooring Specifications.—Folder with detail drawings in standard filing size covering Rubberstone specifications. Flooring over Portland Cement, wooden floors, stair treads, etc. are covered. Rubberstone Corporation, 1400 Broadway, New York.

Terrazzo.—Treatise by Pasquale Galassi covering subject of Terrazzo work, under twenty-nine different headings and forming a basis for a perfect specification. Samples of brass strip will be sent with the specifications. Galassi Company, 345 Lexington Ave., New York.

Minwax Flat Finish.—A.I.A. Classification 25-c-11. Color card and specifications with twelve panels in full colors covering flat finish for wood floors and trim. Minwax Co. Inc., 10 East Huron St., Chicago.

Fifty Years.—Commemorative Brochure covering the period from 1875 to 1925 showing the development of the Holtzer-Cabot organization and its products within the period indicated. Much interesting historical and technical data presented in non-technical and readable form. 50 pp. 8½ x 11. Holtzer-Cabot Electric Co., Boston, Mass.

PARTNERSHIP WANTED.

An architect registered in New York and Pennsylvania desires to make a partnership arrangement with a good architect or firm. Good all around man, qualified in both design and construction but preferring the practical end of the work. Thirteen years' experience. Capable of handling draft-room, superintendence, etc. Box 300 care Pencil Points.



LITHOGRAPHIC CRAYON DRAWING BY WENDELL P. LAWSON
Christ Church, Oxford. Corner of the Great Quadrangle.

PENCIL POINTS

FROM THE PITTSBURGH CHAPTER, A.I.A.

Pencil Points,

Gentlemen:

The Pittsburgh Chapter of the American Institute of Architects has noted with concern the proposal to destroy the Allegheny County Jail Building. This organization has studied the subject with care and wishes to submit herewith certain specific and practical suggestions which are designed (1) to clear off some of the area now occupied by the jail structure, as a concession to traffic needs; (2) to make a modification of the present use of the structure; and (3) to retain the original and most interesting portion of the structure as a combined utilitarian building and architectural monument. Therefore, the Pittsburgh Chapter, A. I. A., submits the following recommendations, requests your serious consideration thereof, and bespeaks the favor of a specific comment and reply.

Recommendation No. 1—It is recommended that the present Allegheny County Jail Building be restored to its original area and exterior condition as designed by Henry Hobson Richardson, one of the greatest American Architects; and that the interior of the original Richardson jail be remodeled to serve as a County "Hall of Fame."

Recommendation No. 2—It is recommended that such a solution of the thorofare, bridge-approach, and kindred city planning problems of the jail locality be adopted as will adequately meet the City's present and future traffic requirements and will not prevent the restoration of Richardson's architectural masterpiece as a necessary, utilitarian, and dignified building. It is confidently asserted that this building will prove a credit to the municipality and an appropriate companion to both the adjacent public buildings and to the mercantile developments that will inevitably follow the completion of the Liberty Bridge.

With respect to these recommendations, the Pittsburgh Chapter of the A. I. A. desires to say:

- (a) The accumulation of public records has made the question of their safe and accessible housing in a "hall of records" an obligation not much longer to be neglected. The cost of acquiring an expensive site near the Court House together with the cost of erecting a suitable hall of records building might be expected to agitate the taxpayers if the present suggestion were not so pertinent and satisfactory.
- (b) To restore the jail building to Richardson's original design will necessitate the removal of the forbidding looking wall of the jail yard, the diagonal north-east wing, parts of the north wing and the east wing, and, perhaps, some other minor portions.

(c) It is granted, of course, that the encroachment of the jail structure upon Diamond Street, should be corrected.

(d) The Pittsburgh Chapter A.I.A. is concerned to tender its services to public officials, in advisory capacity, during the development of the suggested alterations, so that a great architectural monument may not be unduly mutilated or destroyed; or this Chapter will undertake to promise, on behalf of its parent body, the American Institute of Architects, that an advisory committee will be appointed for the same purpose by the President or Board of Directors of the Institute.

The Pittsburgh Chapter has been careful to ascertain that a feasible plan, meeting the conditions of the Chapter's second recommendation, has actually been devised. No doubt this plan will be made public at the proper time by the City Planning Commission, inasmuch as that department of the City government is now engaged, by direction of the City Council, in developing general plans of which the plan here mentioned is a part.

The subject matter of the present communication has been given very careful study by this Chapter and by a special committee appointed for the purpose. A formal resolution of the Chapter is, for your further information, quoted in full as follows:

"WHEREAS the group of buildings known as the Allegheny County Court House and Jail has been for years recognized, in this and foreign countries, as an American architectural monument of outstanding merit; and its architect, Henry Hobson Richardson, who is placed among the greatest architects of this country, regarded this group as his best work; and

"WHEREAS recent serious proposals to destroy the jail portion of this masterpiece have been given considerable commercial publicity; and

"WHEREAS there appears to have been no serious attempt to reconcile the alleged objections to the present use of the jail building and various municipal requirements;

"THEREFORE BE IT RESOLVED that the Pittsburgh Chapter of the American Institute of Architects present to the proper public officials and to local civic bodies, the proposal to reduce the jail structure to its original extent and exterior condition and to remodel the interior to serve as a much needed hall of records, to the end that this architectural masterpiece may be conserved to future generations of Americans as an historic and cultural asset".

Very truly yours,

HOWARD K. JONES, President.

THOMAS W. LUDLOW, Secretary.



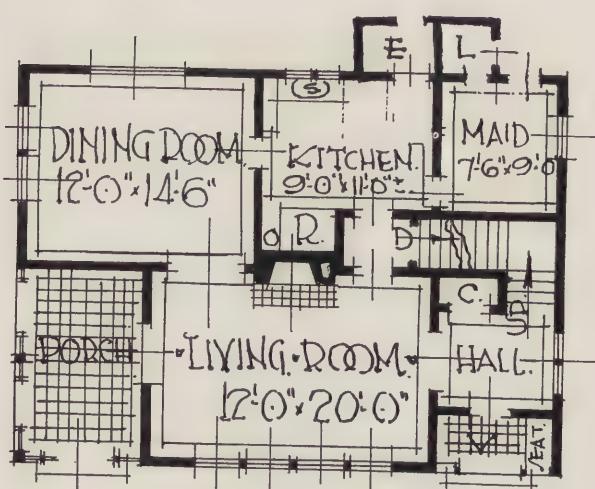
PENCIL RENDERING BY LOUIS KURTZ

Residence for Mr. James M. McCutcheon. W. Stanwood Phillips, Architect.

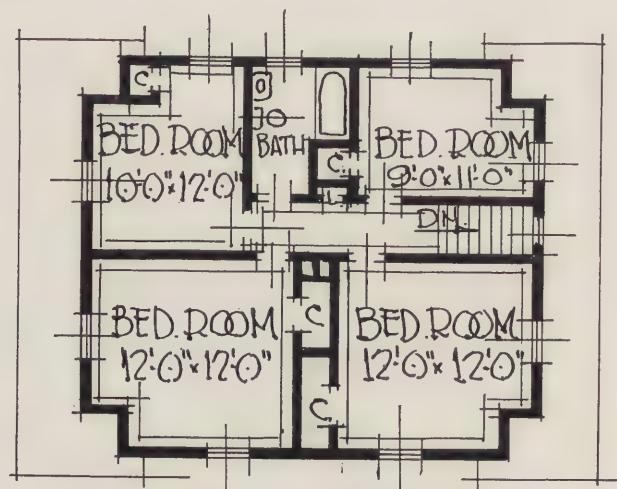
PENCIL POINTS



Perspective.



First Floor Plan.



Second Floor Plan.

DESIGN FOR SMALL SUBURBAN HOUSE

ROYAL BARRY WILLS, Architect.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

TAKING things, by and large, all things considered and making due allowance for wind and tide, we figure that the first of our monthly competitions has not been such a failure.

It is now known to every pencil pusher throughout the length and breadth and thickness of this broad land, including such suburbs as London and Melbourne, that the stupendous sum of ten dollars is being offered here each month for the most meritorious contributions in four different classifications, as set forth in detail in the issues for September and October. Remember—each competition closes on the fifteenth of each month, the results being announced in the following issue of PENCIL POINTS. The next competition, therefore, closes on November 15th. So if you think you can do better than the prize winners for October, whose efforts are set forth and displayed below, just put a bit of pink ribbon around your manuscript or drawing and submit it for consideration.

WELL, here is the best verse.

Oh, how I love an Architect
For one of them said to me,
"Why don't you build a house, m'lad?
Of rent you'll then be free".
I listened to his blandishments,
I fell for all he said,
Of comfort, style, convenience, pride—
And told him—"Go ahead".

In admiration of his plans
My wife and I were lost;
We said, "That's just the home we want;
What will the building cost"?
He looked the drawings o'er a bit
In an appraising way,
And nonchalantly he answered us,
"Eight thousand, I should say".

To friends and neighbors, far and wide
We said, "We're going to build".
Some of them pitied us and some
With jealousy were filled.
And then, when we could not back out,
We learned, with grievous groans,
An architect's eight thousand house
Costs fifteen thousand bones.

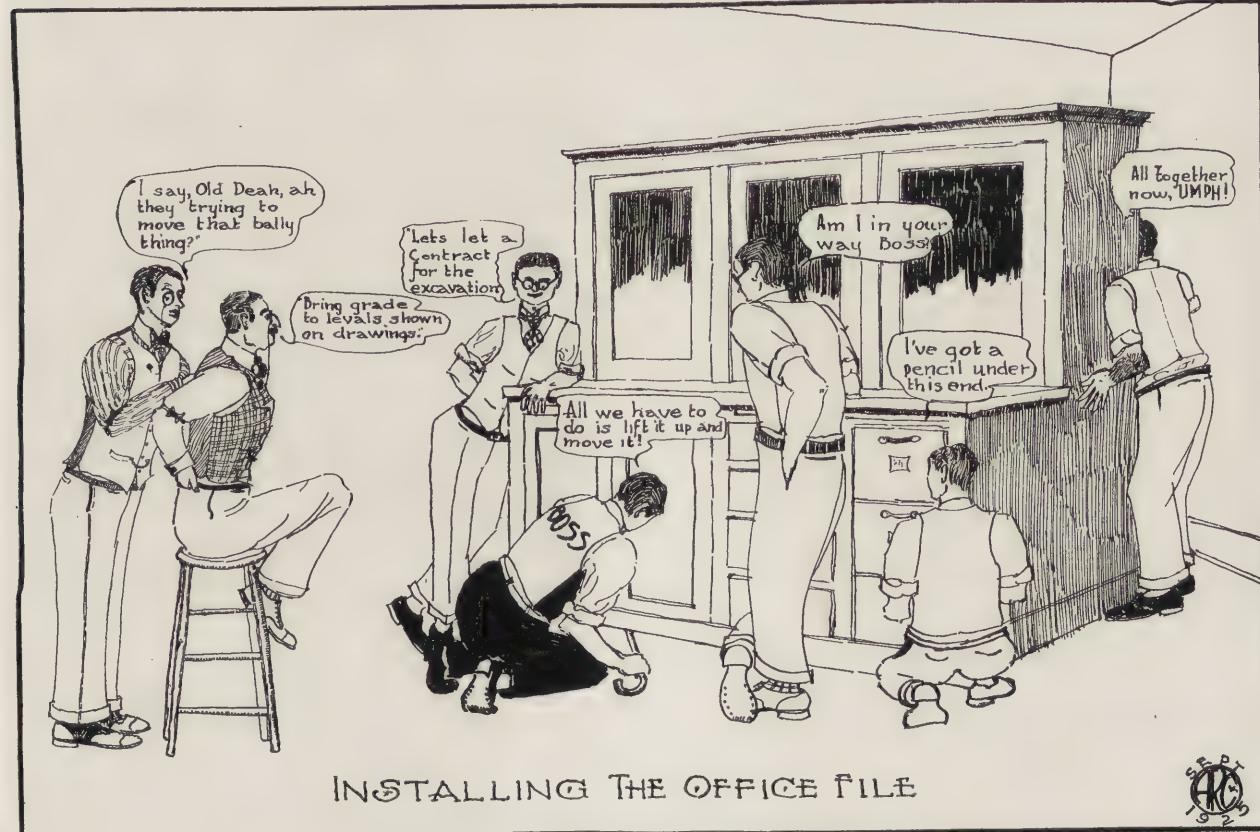
J. M. Moorhead.

and here are a couple more:

EFFICIENCY
O, isn't it great to be up to date
As we live in this year of grace,
With a reference system to allocate
Our dope in a specified place?

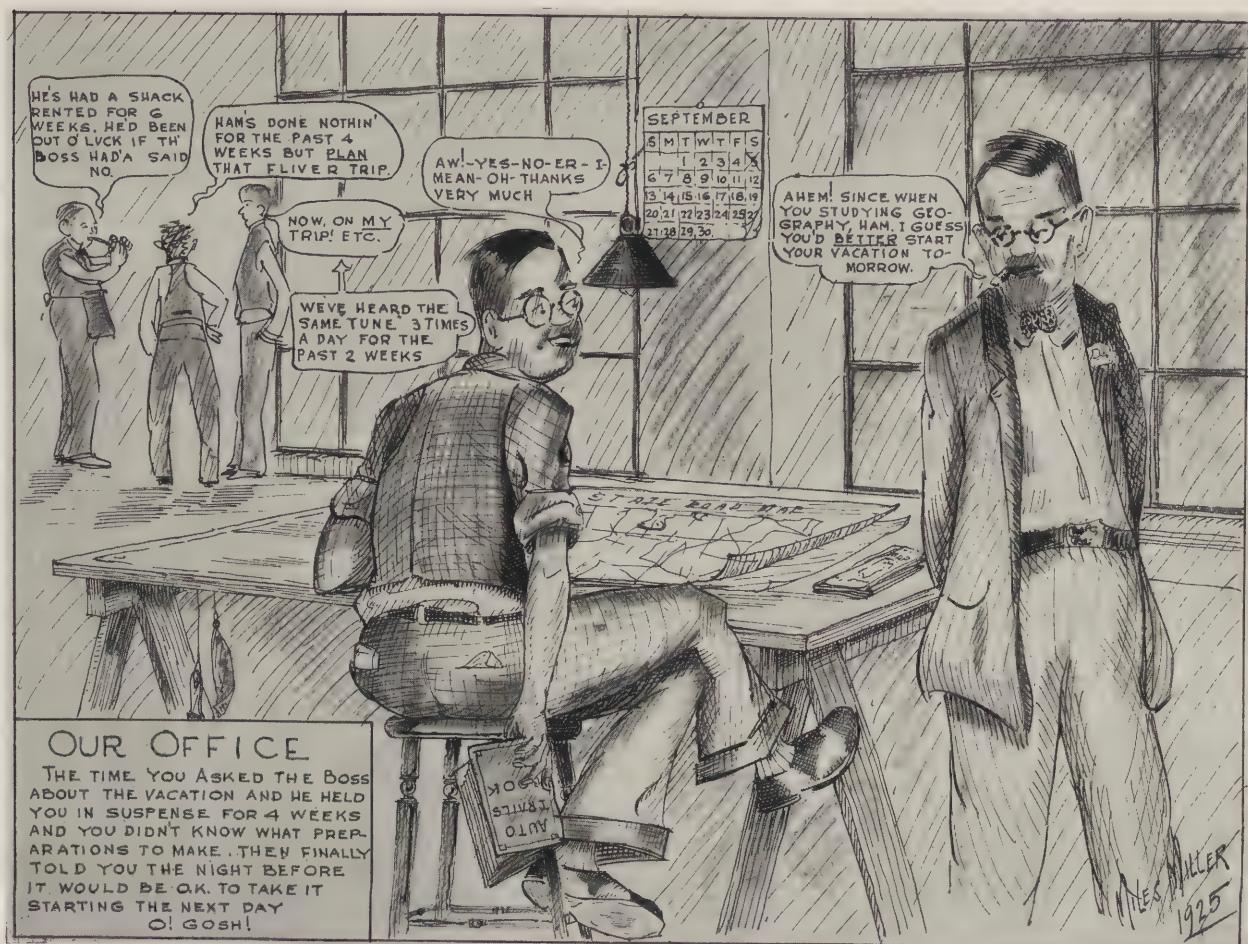
We dully record to prove and safeguard
That "nothing's new under the sun",
But, it takes us so long to find the card
We seldom get anything done

Thos. Rollands



BY ARTHUR R. CARPENTER OF CHEHALIS, WASHINGTON.

PENCIL POINTS



CARTOON BY MILES MILLER.

Sing a song of six per cent,
Pockets full of dough,
That's what the client thinks
Because he doesn't know.
Poor darned Architect
Knows he's just a slob;
Six per cent is not so much
Unless you've got a job.

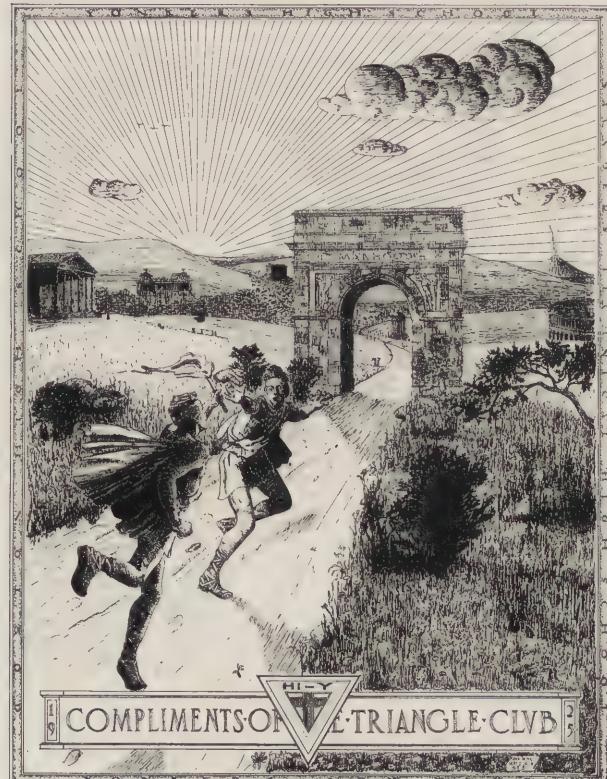
Sing a song of six per cent
Arc'tec full of rye;
Million-dollar commissions
Float before his eye;
When the night is over,
How his head does ache!
A yiddish flat at two per cent
Is what he'd gladly take.

R. M. Brogle

AND now we come to the cartoons. The prize is given to Andrew E. Egeressy of New York, a new comer to our pages. There are many amusing things that happen both within and without the office which should be recorded for the benefit of the whole fraternity; so let there be more cartoons!

SKETCHES represent by far the major part of each month's offerings. We are glad of this and hope it will always be so for surely nothing is more important than the development of one's ability to think quickly on a scrap of paper. Here again the prize goes to a new comer, Juliet Peddle. Several other sketches submitted this month are reproduced also, as well as some others received before the prizes were announced.

THE prize for class four goes to Joseph Mink, Jr., New York, for his bookplate designed for the Triangle Club of Yonkers. Remember, class four includes anything and everything not falling within class 1, 2, and 3.



BOOKPLATE BY JOSEPH MINK, JR., NEW YORK
(PRIZE—Class Four—October Competition)

HERE AND THERE AND THIS AND THAT.

SKETCHES

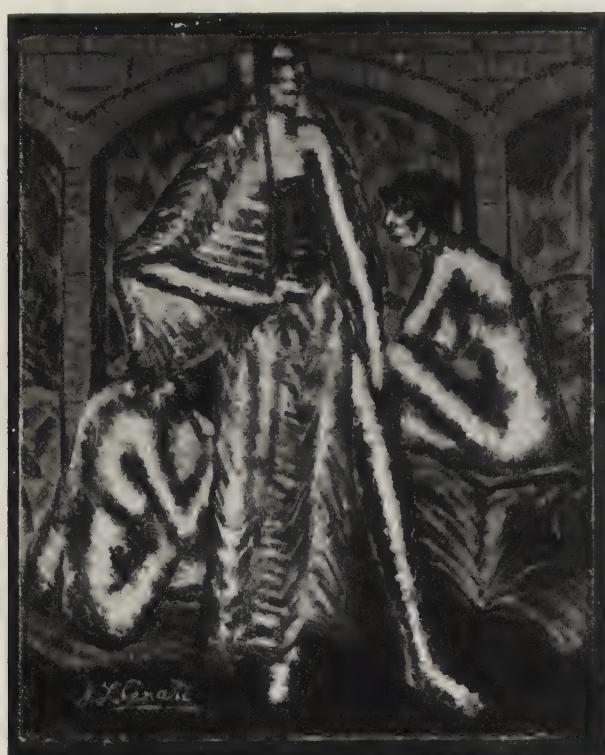


Sketch by Juliet Peddle.

(PRIZE—Class one—October Competition)



Sketch by E. Armstrong.



Drawing by J. L. Cerati.



Water Color Drawing by Hoyt Sherman.



H. SPECIFICATION KIMBALL



L. CAPTAIN LICHT



FOREMAN WALLHEINKE



G. FLUES REEKE



TYPIST HIRLE



L. SHEIK DUNBAR



J. ATELIER McGRATH



G. MOLDINGS CADY

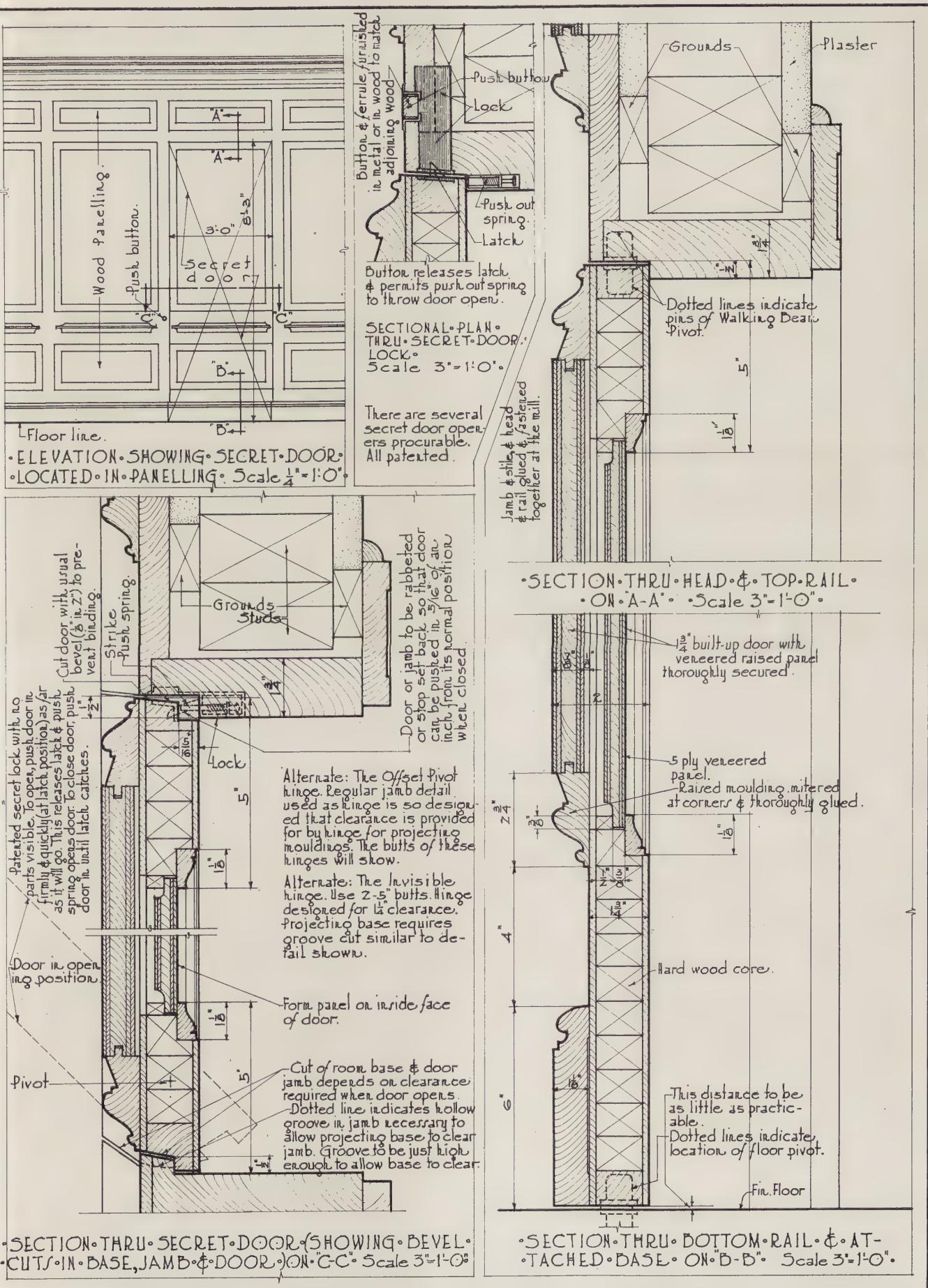


ERNEST SIBLEY



A. ERASER EGERESSY
BY ME

BY ANDREW E. EGERESSY—ERNEST SIBLEY'S OFFICE, PALISADE, NEW JERSEY.
(PRIZE—Class Three—October Competition)



A PLATE FROM PART II OF "GOOD PRACTICE IN CONSTRUCTION."

(This book, by Philip G. Knoblock, is now in course of preparation by the Publishers of Pencil Points)

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. BEACH

PART XIII

STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

CONTINUING the specifications for a Consolidated District School building, we arrive at Division G, Structural Steel and, next following, Division H, Miscellaneous Metal Work. This latter division is variously termed "Ornamental Iron Work", "Stair Work" etc. Sometimes it is included with the steel, either because the steel fabricators in a locality are equipped to do the minor work as well as the structural or because the job is not large enough to warrant separation.

Assuming it advisable to have at least the two divisions of this general subject, there is likely to arise the further question as to whether or not such features as woven wire work, fences, steel sash, elevator cars and enclosures, vault door sets etc., ought to be treated separately in order to facilitate the direct dealing of the general contractor with such supply concerns, presumably to the advantage of the owner also.

These are points to be considered and disposed of in connection with any specification or to be made the rule of practice in any office. It must be borne in mind that we are not attempting here to produce a standard form of specification, except only as relates to the general conditions. Rather, are we offering forms for everyday use, limiting them to a single theoretical structure.

We thus proceed with

DIVISION G, STRUCTURAL STEEL

NOTE. (Introductory for all Divisions) The Contract and General Conditions of these Specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these Specifications for Structural Steel. The Contractor shall refer thereto as forming integral parts of his Contract.

ART. 1. SCOPE OF WORK.

(A) THE ITEMS under this Division include:

(1) ALL STRUCTURAL STEEL, fabricated, painted and erected.

(2) ALL LOOSE LINTELS, fabricated, painted and delivered.

(3) SUCH OTHER WORK as is herein set forth.

ART. 2. GENERAL DESCRIPTION.

NOTE. There is here given for convenience of Contractors, a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the specifications following, beginning with Art. 3.

(B) GIRDERs, BEAMS, RODS ETC. shall be provided and erected for support of balcony in assembly hall as shown on Sheet 19. This includes all steel in balcony framing except reinforcing bars.

(C) ALL OTHER PLATES, RODS AND STRUCTURAL STEEL, wherever required, shall be provided and erected as shown, including hangers and angles for plank walks in attic, members supporting cut stone, etc.

(D) LINTELS shall be provided for all openings in brick and tile walls where concrete lintels are not called for. Loose lintels weighing 100 lbs. or less shall be delivered to Masonry Contractor and his receipt secured for same. Larger lintels shall be properly set by Steel Contractor. Hangers and anchors shall be furnished for same, where required, and properly placed in wall (or in forms, where same are to be bedded in concrete).

(E) STAIRS, FURRING MEMBERS, CAST IRON and other steel and iron work other than structural are included under other Divisions, but this Contractor shall provide and install structural steel beams, rods etc. in floors and landings for support of stair members.

(F) CONNECTIONS FOR OTHER WORK. This Contractor shall make careful note of all connections of other work to structural members and provide proper bolt or rivet holes for same, all correctly indicated on shop drawings. Where so indicated, or conditions make necessary, he shall also provide connection angles of proper

strength riveted to structural members. Rods and anchors in concrete girders over gymnasium ceiling will not be included with structural steel.

ART. 3. STEEL.

(A) MATERIAL. All steel shall meet the requirements of the Manufacturer's Standard Specifications as revised Apr. 22nd, 1919. Structural members shall be "Class B," rivets "Class C."

(B) SHOP DRAWINGS AND SETTING DIAGRAMS shall be submitted for approval as specified in Art. 4 of the General Conditions.

(C) FINISHED WORK shall be in accordance with approved shop drawings and shall be true and free from twists, kinks, buckles, open joints, loose rivets or bolts or other defects.

ART. 4. FABRICATION.

(A) FRAMING. All connections shall be as detailed or, where not specifically shown, shall be in accordance with standard specifications given in Carnegie Steel Co's. 1923 Handbook. Connection members and their riveting shall, in every case, develop the maximum strength of the minor member being framed. Abutting surfaces of compression members shall be milled and close-fitted whenever necessary to develop full stresses in those members. All abutting members in tension joints shall be cut true and square and be fitted close together.

The maximum clearance of beams framing into beams shall be $\frac{1}{8}$ ". Beams connecting to columns shall extend within $\frac{1}{4}$ " of faces of columns.

(B) TRUSSES AND PLATE GIRDERS shall each be shipped in one piece unless otherwise indicated, with necessary plates. Trusses shall be built with camber as shown. Gussets shall be $\frac{1}{2}$ " thick unless otherwise shown. Filler plates shall be provided where necessary, with edges flush with other members.

(C) CUTTING AND FITTING. This Contractor shall do all necessary cutting, fitting, and drilling of his work for the accommodation of other trades and shall do what is necessary to secure correct information for same, both before and after steel is delivered. No cutting or drilling will be permitted which will impair the strength of any structural member.

(D) SUBSTITUTION. Where exact sizes and weights of steel called for are not to be had, the Contractor shall secure the Architect's approval of suitable, available sizes in time to obviate any delay due to such substitution.

(E) BEARINGS. All beams and channels 12" and over shall have at least 12" bearing at wall-ends, all others have at least 8", but in no case shall bearing be less than $\frac{2}{3}$ the depth of bearing plates. All lintels not otherwise shown shall be at least 20" longer than widths of openings.

ART. 5. BEARING PLATES.

(A) IN GENERAL. All steel members bearing on masonry or concrete shall have steel bearing grillages or plates as shown, of the following sizes. Members smaller than 5" may bear direct, without plates. All plates shall be single thickness of metal.

(B) SIZES of plates, where not otherwise detailed, shall be as follows:

For 24" beams, 16" x 20" x 1".

For 18" and 20" beams and 15" No. 60 beams, 16" x 16" x $\frac{1}{8}$ ".

For 15" No. 42 beams, 12" x 16" x $\frac{3}{4}$ ".

For 12" beams and 15" channels, 12" x 12" x $\frac{5}{8}$ ".

For 10" beams, 10" x 12" x $\frac{5}{8}$ ".

For 8" and 9" beams and 10" and 12" channels 8" x 10" x $\frac{1}{2}$ ".

For 7" beams and 9" channels, 8" x 8" x $\frac{1}{2}$ ".

For smaller members, 6" x 8" x $\frac{3}{8}$ ".

For doubled 15" beams, 20" x 20" x 1".

For doubled 10" and 12" beams, 16" x 16" x $\frac{7}{8}$ ".

For doubled 8" and 9" beams, 12" x 16" x $\frac{3}{4}$ ".

For doubled 6" and 7" beams, 12" x 12" x $\frac{5}{8}$ ".

For doubled 10" and 12" channels, 12" x 16" x $\frac{3}{4}$ ".

For doubled 8" and 9" channels, 12" x 12" x $\frac{5}{8}$ ".

For doubled 6" and 7" channels, 10" x 12" x $\frac{1}{2}$ ".

(C) VARIATIONS. Where bearing space will not permit the use of list size, same may be changed to other

PENCIL POINTS

equivalent area, with thickness increased, if necessary, to resist increased bending moment. Where beams on opposite sides of wall come closer together than 10", they shall rest on common plate, of area equivalent to combined area called for.

ART. 6. RIVETS.

(A) ALL SHOP CONNECTIONS shall be riveted.
(B) ALL FIELD CONNECTIONS in trusses and built-up girders and all connections of purlins to trusses shall be riveted, excepting only in certain cases where conditions make riveting impossible, when bolts may be used, but only on approval of the Superintendent.

(C) WORKMANSHIP. All rivets shall have full hemispherical heads concentric with rivet holes and in full contact with the surface. No loose or imperfect rivets will be allowed to remain in any part of the work. Hot rivets must enter holes without use of hammer. Pitch lines of rivets for all truss members at each joint must meet at a point. All riveted work shall have all parts well pinned and bolted together before riveting is commenced. When rivets have more than 1" grip, they shall be driven by a machine capable of exerting direct pressure upon the rivet. Rivet heads showing on under sides of lintels and those on bearing surfaces shall be countersunk and chipped.

(D) DIAMETERS. No rivet shall have a less diameter than thickness of member through which it passes. Rivets not otherwise specified shall be $\frac{3}{4}$ " diameter.

(E) RIVET HOLES. Diameter of punch for steel less than $\frac{5}{8}$ " thick shall not be more than $\frac{1}{16}$ " larger than rivet nor that of die more than $\frac{1}{8}$ " larger. Steel more than $\frac{5}{8}$ " thick, except for minor details, shall either be drilled from the solid, or else sub-punched and reamed so as to remove at least $\frac{1}{16}$ " of metal.

ART. 7. SEPARATORS.

(A) IN GENERAL. Separators shall be provided, spaced as shown, or not more than 5'0" o. c., in each case where two or more beams or channels are grouped to form girders or lintels.

(B) PIPE SEPARATORS of proper sizes and spacing shall be used for beams and channels 5" and less.

(C) CAST IRON SEPARATORS, Carnegie standards, properly spaced, shall be used for all beams and channels larger than 5".

ART. 8. TIE RODS AND ANCHORS.

(A) TIE RODS shall be furnished wherever called for, of sizes shown, with ends threaded for standard nuts. Unless otherwise shown, threaded ends shall be upset so that net diameter is not reduced. Turnbuckles, where called for, shall be of approved pattern. Tie rods supporting wood members shall have heavy cast iron or steel washers or plates between nuts and wood bearing. All nuts on rods shall be screwed tight at proper level and threads cut or riveted to prevent nuts working loose.

(B) ANCHORS shall be provided on wall end of each beam over 4" deep, on all lintels and girders 8" and over and for all beams, channels, girders and trusses as indicated on drawings. Wall anchors for single beams (unless otherwise noted) shall be as shown on page 184, Carnegie 1923 Handbook. Those for pairs or more shall be standard strap-and-pin anchors, with two $\frac{3}{4}$ " bolts each. Straps shall be $\frac{3}{8}$ " x 3" and pins $\frac{3}{4}$ " x 8", unless otherwise shown. When beams are in line they shall be strapped together with $\frac{3}{8}$ " x 3" straps, 12" long, with two $\frac{3}{4}$ " bolts in each beam. All roof beams bearing on outside walls shall have anchors extending within $4\frac{1}{2}$ " of outside face of wall.

ART. 9. INSPECTION.

(A) BEFORE DELIVERY. No specific allowance is required of Contractor to cover cost of inspection, but he shall afford the Owner's Inspectors every opportunity which they may demand for inspecting materials in mills and fabricating plants.

(B) AFTER DELIVERY, the Contractor shall afford like opportunity to the Superintendent.

ART. 10. ERECTION.

(A) SHIPMENT of material shall be begun, in order needed, as soon as possible after approval of shop drawings, and shall continue as rapidly as necessary to avoid delays at the building, but not to cause accumulation of more steel on premises than supply for one story.

(B) MARKING. Each separate member shall be plainly marked in protected, plainly-visible location, in accordance with reference numbers on setting diagrams.

(C) PRECAUTIONS. Every care shall be taken in shipping, hauling and unloading to avoid distorting any member. Rope slings shall be used in hoisting, placed to avoid pressure on light members. Steel on premises shall be neatly stacked in such manner as to prevent undue strains and stresses.

(D) SETTING. All steel members shall be put in place by this Contractor, except that small loose lintels and wall bearing-plates will be set by Mason. Steel Contractor shall give Mason due instructions for setting bearing plates for structural steel other than loose lintels and shall also instruct Concrete Contractor regarding placing of anchors in concrete and be responsible for same. Column base plates shall be set by Steel Contractor in 1:2 Portland cement grout, adequately filling space under plate to proper level. Grout shall be fresh when used and shall not exceed 1" thickness.

(E) SETTING, BOLTING AND RIVETING. Field connections shall be bolted or riveted as specified in Par. B of Art. 6. Threads of these bolts shall be reduced $\frac{1}{8}$ " in diameter (to prevent destruction in driving) and bolts or nuts turned to a driving fit. All rivets shall conform to specifications in Art. 6. Members shall be assembled in field without undue mauling or drifting. No drifting to enlarge unfair holes will be allowed. Minor corrections shall be made by reaming. Serious defects may not be corrected in the field, but shall be called to the attention of the Superintendent for decision as to the method of procedure. He may order new holes drilled or the member rejected and replaced, and same shall be done promptly.

ART. 11. PAINTING.

(A) SHOP COAT. After the steel has passed shop inspection by a Representative of the Architect, it shall be thoroughly cleaned of scale and rust and given one heavy shop coat of approved graphite paint or red lead smoothly ground in pure linseed oil, 33 lbs. to the gal. All planed or turned surfaces shall be coated with white lead mixed with tallow before shipment. All surfaces which are inaccessible after riveting, including contact surfaces, shall be painted before assembling. All members which are to be delivered to Mason to be built in shall, before delivery receive a second coat of paint as specified in Par. B following.

(B) AFTER DELIVERY. All surfaces shall receive a second coat, same as first, except that it shall be of different color graphite or, if of red lead, shall contain a sufficient percentage of lampblack, evenly mixed, to make noticeable difference in color. All abraded surfaces and all parts inaccessible after erection shall be painted before erection. No field painting will be allowed in wet or freezing weather.

DIVISION H. MISCELLANEOUS METAL WORK.

NOTE. (Same as introductory to Division G.)

ART. 1. SCOPE OF WORK.

(A) THE ITEMS under this Division include:

- (1) ALL CAST IRON WORK.
- (2) ALL STEEL STAIRS, RAILINGS AND LADDERS.
- (3) ALL PROTECTION ANGLES AND PLATES.
- (4) ALL GRILLS AND WIRE GUARDS.
- (5) SUCH OTHER WORK as is herein set forth.

ART. 2. GENERAL DESCRIPTION.

NOTE. There is here given for convenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following Specifications, beginning with Art. 3.

(A) CAST IRON manhole frames and covers shall be provided for transformer vault and coal room roof, to be delivered to concrete Workers. Flue cleanout door and cast iron lintels and cap for chimney are included under Div. D.

(B) STEEL AND IRON STAIRS, with newels, pipe rails and square steel balusters on channel stringers, shall be provided and installed in the several locations shown. Cast and wrought iron parts shall be provided for newels and rails be detailed. All structural members for stairs and platforms shall be included, except embedded structural beams adjoining stair openings in floors and landings, which are in Div. G.

PENCIL POINTS

(C) PIPE RAILS shall be provided and installed in connection with all stairs, both steel and concrete, and in other locations shown, including rails at windows and for guarding machinery in engine and fan rooms. Wall-rails of stairs shall be supported on bronze brackets as detailed.

(D) LADDERS shall be provided and installed for access to roof-space and in boiler room; also one provided for transformer room to be delivered to concrete Workers. Rungs, clamps and steel bands in chimney are included under Div. D.

(E) GRATINGS of steel bars shall be provided back of boilers and over areas of transformer room and fresh-air intakes and delivered to Mason to be built in.

(F) STEEL DOORS. Rolling steel door shall be provided and installed in opening between boiler and coal rooms. Steel doors and frames shall also be provided and installed for ash storage and ash dump as detailed; also an iron door to waste-paper room in basement.

(G) PROTECTION ANGLES shall be provided for curbs and scale-pit, to be built in by Mason.

(H) STEEL PLATES shall be provided as detailed for trench and pit covers in boiler room and basement; also platform and members supporting same in boiler room.

(I) CAST IRON GRILLES shall be provided and installed in radiator recesses in vestibules and corridors. Register faces for duct openings are included under "Ventilating."

(J) WOVEN WIRE guards and doors shall be provided and installed in:

(1) UPPER STORY, to enclose ladders.

(2) WOODWORKING SHOP, to form partition enclosing tool room.

(3) GYMNASIUMS, to protect inside of all windows and glass in doors and transoms.

(4) BOILER ROOM window and door openings on all elevations.

(5) TRANSFORMER VAULT. These last are to be delivered to Mason for installation.

(K) SOCKETS AND RODS, for support of equipment etc. on gymnasium ceilings, shall be provided as detailed, placed by Contractor under this Division, to be built into concrete.

MATERIALS

ART. 3. STEEL.

(A) GRADE. All steel shall be Manufacturers' Specifications Structural Grade, free from irregularities or imperfections of any kind.

(B) FINISH. Steel plates and other members shall be brought out of wind, shall be true and free from warp, buckle or twist and all exposed edges ground smooth. The complete work shall present a well finished appearance. Lettering on exposed rolled members shall be removed and surface left smooth.

ART. 4. CAST IRON.

(A) IN GENERAL. Cast iron shall be tough and gray, true to patterns, free from flaws and excessive shrinkage. It shall be cast in facing sand in best manner from perfect patterns, and with all lines, reliefs and arrises sharp and perfect.

(B) CONNECTIONS. All bolts and screw holes shall be drilled (not cored) and countersunk. Castings joined together and not rabbeted, shall have lugs and shall be fitted together with shoulders and brackets.

(C) FINISH. All exposed parts shall be smoothly finished. Castings shall be free from blow-holes, cracks, cold shuts and shall be of fine texture, unwarped and sound. Faces in contact shall be milled.

(D) REJECTION. All rejected castings shall be broken, or marked as directed by Inspector, and promptly removed and replaced.

WORKMANSHIP.

ART. 5. IN GENERAL.

(A) SHOP DRAWINGS. The Contractor shall submit two copies of all shop drawings, setting diagrams and schedules required for various parts of the work and also all requisite copies of Maker's illustrations and descriptions, all as specified in Art. 4 of Division A.

(B) MEASUREMENTS of all features which may be affected by construction at the building shall be checked by the Contractor and shall govern his fabrication. He shall report any serious discrepancies to the Architect and receive special instructions before proceeding with work affected. Doors and sash shall be made with proper bevels and clearances to operate without binding.

(C) PATTERNS for all cast work of newels, risers, brackets, etc., shall be furnished by the Contractor and submitted for inspection.

(D) CUTTING AND FITTING of work under this contract shall be done by this Contractor wherever necessary for accommodation of the work of other trades. He shall give the necessary information to Mason and Concrete Foremen for location of anchors and other embedded members so that these Mechanics may make proper preparations to receive same. All such members shall either be built in, caulked with lead and sulphur or secured by lead expansion-shells.

(E) ASSEMBLED WORK shall have sharp bends and corners; close, invisible joints and invisible spot-welds. All welded joints shall finish same size and shape as adjoining members. All joints shall have same strength as adjoining members. Screws, rivets and bolts on exposed surfaces shall be countersunk and invisible, unless otherwise provided.

(F) HARDWARE. This Contractor shall drill, countersink, fit and reinforce his work for the attachment of hardware, all in accordance with templates to be furnished him by other trades.

(G) ANCHORS. All members shall be rigidly anchored in place. Built-in anchors shall be of $\frac{3}{8}$ " x $1\frac{1}{4}$ " steel bars, 8" to 12" long, with ends split 4" and bent at right angles. Applied anchors shall be approved heavy lag screws in lead expansion shells. Expansion screws smaller than $\frac{5}{8}$ " shall be of brass or bronze. Anchors shall be 2' 6" o. c., unless otherwise shown. Exposed heads shall be countersunk or hexagonal, as required.

(H) INSPECTION. All work shall be subject to inspection at the shop, as well as on the job, and due notice shall be given the Architect when the various parts will be ready for inspection.

ART. 6. STAIRS AND LADDERS.

(A) GENERAL ARRANGEMENT of stairs, number of flights, treads, risers, newels etc. is shown on general drawings. Width of treads from face to face of risers is given on drawings, but height of all risers in each flight shall be exactly proportioned from distance between landings measured at building. Platform landings shall be included as part of stair construction where so shown, and steel plates provided for carrying concrete fillers. Terrazzo for stair treads and landings is included in Division M.

(B) DESIGN AND DETAILS of stairs shall be as shown by detail drawings. The strings shall be steel channels to which steel angle brackets shall be secured in shop ready for risers and treads to be bolted in place in the field. All newels, bearing plates, curbs, landing nosings, floor fascias and risers shall be of steel, built up as shown. Strings shall be supported on building construction and bolted to newels as detailed. Wall strings shall be anchored to wall and shall have closed end at tops of flights. Where stairs or landings cross windows, curbs and fascias shall be provided between jambs. Bent carriages and fascias shall be executed with extreme care to present a perfect appearance. Steel plates shall be provided on bottoms of channel strings wherever necessary to carry enclosing tile partitions. Bolt-heads and nuts, wherever exposed, shall be hexagonal and shall be fixed in final position.

(C) BALUSTRADES shall be as detailed, with braces and anchors as shown. Full-size detail will be furnished for steel or wrot iron braces, which shall be spaced not more than 5'0" from rail-ends and about 4'0" apart, but not more than 5'0" apart and shall furnish absolute rigid support for rails. Hand rails shall be as specified in Par. A of Art. 7 following.

(D) SPECIAL STAIRS of steel stringers, checkered steel treads and pipe rails shall be provided as detailed, wherever called for.

(E) LADDERS shall be provided from upper story to attic and in all other locations shown. Attic ladders shall have $1\frac{1}{2}$ " wrot iron pipe standards and $\frac{3}{4}$ " pipe rungs, 14" o. c., tapped into standards and with $\frac{5}{8}$ " rods run thru centers of rungs and tap-screwed to standards, to make ladders perfectly rigid. Standards shall be secured at bottom with flanges bedded into floor and shall be turned into brick-work at top and securely anchored. Where not otherwise detailed, stiles shall be of $\frac{1}{2}$ " x $1\frac{1}{2}$ " steel, 16" o. c., bent, rigidly anchored at top and bottom and set out 6" from wall. Rungs shall be $\frac{3}{4}$ " rods, 14" o. c., securely riveted thru stiles.

ART. 7. PIPE RAILS.

(A) HAND RAILS shall be provided for both sides of

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all concrete steps and steel or concrete stairs, except that outside rails only shall be provided for flights 3' 3" and less in width. Rails shall be of standard steel or wrot iron pipe, 1½" I. D., unless otherwise shown. Free-standing rails shall be built up of posts and intermediate members with connections as shown at all intersections. Wall rails shall be bolted to bronze brackets of design shown, not more than 6'0" o. c., rigidly secured to casings or walls. All connections to walls, floors and treads shall be by threaded socket flanges with 3 (or 4) ½" bronze expansion screws each.

(B) GUARD-RAILS shall be provided to protect windows on balcony, in lantern room and in all other locations shown. These shall be of pipe specified in preceding paragraph and fitted with sockets and flanges rigidly secured to walls etc., with expansion screws, as above specified. Rails on balcony front and on dwarf partitions in balcony shall be 1¼" O. D.

ART. 8. STEEL DOORS.

(A) IN GENERAL. All steel plate doors shall be provided complete as shown and detailed. They shall either be set by this Contractor or delivered to Mason to be installed by him, as case may be. All operating parts shall be in perfect working order when accepted.

(B) ROLLING STEEL DOORS shall be of approved type and make, with curtains of interlocking galvanized steel slats, spring-balanced and hand-operated by means of gear and chain at one side of opening. All details shall be submitted for approval.

(C) AS CHUTE DOOR and frame shall be provided complete with guards, wire ropes, balance weights, pulleys, handles and hinges, as shown by detail.

(D) DOOR TO WASTE-PAPER ROOM in basement shall be of No. 10 gage galv. iron with edging all round of 1¼" x 1¼" steel channel forming rabbet. Door shall be fitted with hasp and staple and be hung on 3 heavy galv. hinges in frame of 8" steel channel.

ART. 9. COVER PLATES AND GRATINGS.

(A) TRENCH COVERS AND PLATFORMS shall be of approved checkered steel plates of thickness shown, of exact size to fit each location, no section longer than 6' 0". Each plate shall have a ¾" hole near each corner and 4 loose ½" hook handles 24" long shall be provided. Holes shall be provided for passage of pipes and proper fitting done wherever required to match rabbets in concrete floor. (B) GRATINGS shall be provided over areas and other locations wherever required, and in accordance with details, either fixed or hinged as stipulated, and fitted in frames, with approved anchors for concrete. Gratings over fresh-air intakes shall be 2" x ¼" steel bars 1½" o. c., with line of pipe separators and ¾" rod thru center of each grating. Ends of bars shall be riveted to frame, which shall be 2" x ½" around each section, resting in rabbet of 2½" x 2½" x ¼" angle, anchored to walls all around opening. Gratings shall be in sections about 6' 0" long, evenly divided to fit spaces. Special gratings shall be provided as detailed for transformer vault areas. Gratings shall be delivered complete at building ready to be put in place by concrete workers.

ART. 10. PROTECTION MEMBERS.

(A) STEEL ANGLE GUARDS shall be provided for jambs of doors where called for, of sizes shown, and fitted with split-end anchors about 4' 0" o. c., all delivered complete ready for Mason to put in place.

(B) STEEL EDGE ANGLES shall be provided for concrete curb and edges of pits where called for, of sizes shown, neatly bent to radius where required and fitted throughout with split-end anchors about 3' 0" o. c., all delivered complete, ready to be put in place by concrete workers.

ART. 11. CAST IRON WORK.

(A) MANHOLE, FRAMES AND COVERS shall be provided where called for and in accordance with detail, delivered at building, to be built in by concrete workers.

(B) GRILLES shall be of cast iron where so shown and shall be of highest type casting, in strict accordance with details. Models for ornamental grilles shall be submitted for approval. Each grille shall be accurately fitted and securely anchored in place in approved manner.

ART. 12. WOVEN WIRE GUARDS.

(A) CONSTRUCTION. All window guards shall be made of woven wire in diamond mesh, securely riveted in ⅛" steel channel frames. Guards for doors and transoms shall be similar, but with frames of ¼" round rods with

welded connections. Wire for exterior work shall be No. 8 gage in 1¼" mesh and for exterior work, No. 12 gage in 1½" mesh. Wire shall be so woven as to keep frame in perfect plane and rigid rectangle, as no warped or misshapen units will be accepted. All exterior guards shall be in place by time roof is on. All window guards shall be 4" less in height than distance between head and sill or stool, and shall be hung on narrow butts of sizes shown.

(B) EXTERIOR GUARDS shall be fitted into staff-head rabbet (in wood or metal frames). Those 3' 0" wide and over shall be hung on 4" butts, less than 3' 0" wide on 3½"; those 4' 6" high and over on 3 butts each and less than 4' 6" high on 2 each; all butts to be approved, heavy galv. wrot steel, with riveted brass pins; butts riveted to channel frames and screwed or tap-screwed to jambs. Each guard shall be fitted with locking device shown on detail, and provided with approved 1¼" one-tumbler, cast-brass, spring padlock, all keyed alike; 6 brass keys to be furnished. Each lock shall be secured to guard with 8" of heavy brass chain.

(C) INTERIOR GUARDS. All windows, transoms and sash in all parts of gymnasium shall be provided with guards, constructed in one piece for each opening. Guards for windows shall be fitted in rabbeted jambs as detailed, hinged and locked as specified in preceding paragraph, except that butts shall be bronze-plated. Guards for glass panels in doors and transoms shall be 2" larger each way than glass size. Rods of frames shall be extended 2" at two corners and fitted into wrot iron sockets and shall be provided with hasp and chained padlock, as specified in preceding paragraph. Each hasp and socket shall be secured with countersunk wood screws, inaccessible when guards are locked.

(D) SCREENS shall be provided where called for and of sizes shown, to enclose ladders to attic. Screens shall be 7' 0" high, and made of No. 8 gage wire in 1¼" diamond mesh in ⅛" steel channel frames. All screens shall be designed and constructed to accommodate structural conditions.

(E) WOVEN-WIRE DOORS shall be constructed as specified in Par. D and with edges finished all round with ⅛" x ⅜" bars secured to channels with c. s. bolts 12" o. c. Doors shall be fitted in steel angle frames as detailed, rigidly anchored, and shall each be hung on 3 narrow 3½" approved bronze-plated butts, and fitted with approved substantial night-latch to open with key from outside and knob from inside and protected with 6" x 8" No. 12 gage steel plate. All keys for such doors shall be alike. Standing door of all double doors shall have approved head and foot bolts and sockets.

ART. 13. PAINTING AND GALVANIZING.

(A) CLEANING. All members shall be carefully cleaned of dirt, scale and rust and opportunity given the Inspector to observe same before shop coat of paint is applied. Cast iron shall have all necessary smoothing done ready for painting.

(B) GALVANIZING. All outside wire guards shall be given an extra-heavy hot galvanizing coat after assembling and before being exposed to the weather.

(C) SHOP COAT. After all iron and steel has passed shop inspection, all, except galv. work, shall receive a heavy shop coat of approved black mineral paint. This may be applied on wire work by dipping, but shall be carefully brushed on other work.

(D) FINAL COAT of paint shall be applied before delivery on members delivered to Mason, and at building on all other work that is to be concealed. This paint shall be same as first, except that it shall be dark bronze green in color. Final coat on other members is included under Division O, Painting.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Hawthorne Roofing Tile, Catalog 5.—Contains many colored illustrations, details and specifications for laying Hawthorne Tiles. 16 pp. A.I.A. File 12e2. 8½ x 11. Hawthorne Roofing Tile Co., 22nd St. & 48th Ave., Cicero, Ill.

Elastica French Finishes.—Booklet on the subject of Elastica, the waterproofed stucco, containing illustrations and specification. 16 pp. 8¾ x 11½. U. S. Materials Co., 1515 Kingsbury St., Chicago, Ill.

PENCIL POINTS

Genasco Trinidad Lake Asphalt Mastic—“A New Floor Over Your Old”.—Booklet describing its manufacture, uses, and methods of application. Illustrations, details, tables and lists of installations. 34 pp. 6 x 9. Barber Asphalt Co., 1600 Arch St., Philadelphia, Pa.

Published by the same firm, *Specifications for applying Genasco Asphalt Mastic for Indoor foot and light traffic, outdoor foot and light traffic, indoor heavy traffic, outdoor heavy trucking and traffic (over concrete or other firm and stable base), cold storage (over concrete or other firm and stable base), cold storage (over foundation of wood or cork) plating rooms, acid tank rooms and floors subject to acid liquors, floors subject to severe trucking conditions and standing loads. Also specifications for Genasco Waterproofing.* 8 x 10½.

Sheet Metal Cornices.—Valuable book on the subject containing many illustrations, details of typical cornice construction, blue prints and suggestions for specifications. 32 pp. 9 x 11¾. Copies will be sent free to readers of Pencil Points upon application to the Executive Secretary, The National Assn. of Sheet Metal Contractors, 608 Chestnut St., Philadelphia, Pa.

Period Adaptations for Modern Floors.—A study of the architectural and decorative values of floor treatments exemplified in rooms of period interest with notes on designing and installing of modern floors. Contains many illustrations, color plates, specification data installations and details. Handsome brochure. 60 pp. 8¾ x 11¾. United States Rubber Company, 57th St. and Broadway, New York, N. Y.

Concrete Masonry Dwelling Construction.—Architectural details and specification data for the design and construction of economical firesafe homes of Portland Cement Stucco on walls of concrete building block or tile. Also Portland Cement Stucco Exteriors for Dwellings. Architects' and builders' data covering the correct application of Portland Cement Stucco—with notes on stucco textures and colors using gray Portland Cement as a base. The Lehigh Portland Cement Company, Allentown, Pa.

French Imported Caen Stone Cement.—Attractive brochure in sepia describing and illustrating uses of Caen Stone Cement for all kinds of interior and exterior stone finish effects. Contains instructions, tests and specifications. A.I.A. File No. 21-b-3. 8½ x 11. Palmer Lime & Cement Co., 103 Park Ave., New York.

Treadlite Tile.—New series of floor tile pattern sheets showing eleven standard colors, pattern suggestions and notable interiors in which Bonded Floors have been used. Complete set sent to readers of Pencil Points upon request. Bonded Floors Company, 1421 Chestnut St., Philadelphia, Pa.

Two Doors with but a Singleknob.—Folder illustrating and describing the new Singleknob Garage Door Controller. Richards-Wilcox Mfg. Co., Aurora, Ill.

Holorib Insulated Roofs.—Booklet illustrating and describing uses of this material, application, strength test, details and tables. 18 pp. 8½ x 11. Holorib, Inc., Cleveland, Ohio.

Panelouvre Architectural Data.—Catalogue in file folder—History of Panelouvre what it is, where it can be used, detailed description, detail drawings, specifications, comparative costs and costs, endorsements, installations and instructions. A.I.A. File No. 19-E-17. Ventilouvre Co., Inc., Bridgeport, Conn.

Lighting Specifications.—A.I.A. File 31F—Architectural detail plates on church, restaurant and home lighting. Complete details, illustrations and helpful ideas on direct and indirect illumination. Solves many new and difficult lighting problems and helps the architect in making lighting equipment specifications. Sent free to any architect who requests them on his own letterhead. Curtis Lighting, Inc., 1119 West Jackson Blvd., Chicago, Ill.

Garage Design Data.—A service to architects—Data Sheet No. 34 on the subject of Staggered Facades. Preceding data sheets sent upon request. Ramp Buildings Corp., 21 East 40th St., New York.

Published by the same firm, *Ramp Bulletin. Bulletin 78 contains interesting data on recommendations as to how to relieve “parking” situation in congested districts.*

Galvanum.—Folder giving full information on this subject, specifications, illustrations and color samples. Goheen Corporation of New Jersey, Newark, N. J.

“Ellison” Casement Operator.—Leaflet describing this product containing illustrations and details showing method of installation and operation. International Casement Co., Jamestown, N. Y.

Architect's Handbook of Wiring Devices.—A.I.A. file No. 31-C-7. Covers subject of modern wiring devices in condensed form. Compiled by an architect for architects. 8½ x 11. Hart & Hegeman Mfg. Co., Hartford, Conn.

Aluminum Paint.—Treatise on the physical properties of aluminum paint and its uses in industry. 5½ x 8½. 20 pp. Aluminum Co. of America, Pittsburgh, Pa.

Special Purpose Hinges.—Catalog No. 42. Handbook completely covering subject with illustrations, detail drawings, tables of sizes and weights and prices. A.I.A. File No. 27bl. 8½ x 11. 25 pp. Richards-Wilcox Mfg. Co., Aurora, Ill.

Portfolio of Mantel Designs.—Photographic reproductions of mantels suitable for various uses. Post card size. Georgia Mantel Co., 15 East 40th St., New York City.

Character in Furniture.—Attractive brochure by Arthur Raymond Spencer illustrating and describing period furniture. 4½ x 6½. 24 pp. Stiff Cover. Wilhelm Furniture Co., Sturgis, Mich.

Safety Hand Lamps and Hand Lanterns.—Bulletin No. 2081 covers this line of electrical appliances. Crouse-Hinds Co., Syracuse, N. Y.

Quality Plumbing Fixtures.—Catalogue K. Handsome catalogue showing complete line of bathroom fixtures and specialties and kitchen sinks. Profusely illustrated with color plates, details, roughing in measurement, cross sections and specifications. 242 pp. 8 x 11. Buchram binding. A valuable addition to any architect's library. Thomas Maddock's Sons Company, Trenton, N. J.

Better Electric Lighting in the Home.—Bulletin on the subject indicated prepared by the engineering department of the National Lamp Works, Nela Park, Cleveland.

Published by the same firm, *Factory Lighting Designs. Practical handbook for the installer of lighting equipment, Lighting Designs for Stores, Hotel Lighting.*

Blue Printing Machinery, Blue Printing Accessories.—Catalogue M-23. Contains complete listings of modern types of blue printing machinery as well as blue print room requisites. 6 x 9. 64 pp. C. F. Pease Co., 803 Franklin St., Chicago, Ill.

Published by the same firm, *Catalog of Drawing Instruments covering complete line. Apply for Catalog D-25. 6 x 9. 32 pp.*

Architects Hand Book No. 2.—Technical data of value to architects and builders using Peerless Built-in Furniture. Contains instructions, dimensions, uses, and full information about each piece. 8½ x 11. 30 pp. Built-In-Fixture Co., 2608 San Pablo Ave., Berkeley, Calif.

Published by the same firm, *Peerless Built-In Furniture. Catalog No. 25. Contains illustrations, details, plans and much useful data. 4 x 9. 45 pp.*

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of PENCIL POINTS, published monthly at Stamford, Conn., for October 1, 1925.

State of New York, ss,
County of New York

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared W. V. Montgomery, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the corporation publishing Pencil Points, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Pencil Points Press, Inc., 19 East 24th Street, New York.

Editor, Eugene Clute, 19 East 24th Street, New York.

Managing Editor, None.

Business Manager, W. V. Montgomery, 19 East 24th Street, New York.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Pencil Points Press, Inc., 19 East 24th Street, New York City.

Ralph Reinhold, 19 East 24th Street, New York City.

F. W. Robinson, 19 East 24th Street, New York City.

E. G. Nellis, 19 East 24th Street, New York City.

Marion S. Carpenter, 920 Fifth Avenue, New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

W. V. MONTGOMERY,
Business Manager.

Sworn to and subscribed before me this eighth day of September, 1925.

[SEAL.]

G. H. SYKES,
Notary Public.
My commission expires March 30, 1926.

PENCIL POINTS

VOLUME VI

DECEMBER, 1925

NUMBER 12

FIRST, the new Editor desires to express his hearty thanks and appreciation to all those who have so generously extended their good wishes. Such messages inspire us to exert ourselves to the utmost to justify the faith placed in us by our friends.

We look upon our new responsibilities as a fascinating adventure. It is one of the joys of life that we think we know the direction we should take and are constantly finding a new trail with fresh tracks. If we had ever held the view that everything worth finding out and saying about architecture and the practice of architecture had been said long ago it would be constantly refuted for we are being continually reminded that social conditions are changing and that causes and effects have often been confused. The human element will always keep the art of architecture in a state of flux. There is no subject which is so intimately connected with human life as architecture and there is no other art which is so bent and trimmed to the social conditions which are everlasting-ly changing.

The greatest benefit, therefore, that a journal for the drafting room can furnish to the profession it serves is a frank discussion and painstaking showing of the modifying influences of the various activities and tendencies of human life upon architecture. The practical experience of the older generation should be at the service of youth to temper enthusiasm with a chastened experience.

PENCIL POINTS will continue to emphasize the human side of architecture. It will continue to be published *with* our readers rather than *for* them. To this end we want you to tell us what you want to know about,—what is interesting, puzzling or revolting to your sensibilities in your daily experiences in the drafting room. There will always be room for the provocative article which stimulates thought and interest. A good healthy, vigorous difference of opinion is to be sought. We know that we can't please all our readers all the time. Always to present in our illustrations and letterpress, only the

things that are conventionally accepted would be to stagnate. We must seek out the vital problems of the drafting room and present them in such form that the reader may get the greatest possible informative pleasure and inspiration from their study.

Our vision for the future of PENCIL POINTS shows us many new opportunities for service and we are counting on our large family of readers to co-operate with us. We want each issue of our journal to have breadth and inclusiveness. Architecture has its professional and technical side. If we can publish some of the various solutions of the problems which have to do with design, planning, rendering, field sketches and measured drawings, with the making of working drawings, the selection of suitable building materials and the workmanlike specifications for their use and installation, and for superintendence we will have gone a long way toward meeting the problems of the drafting room.

The use of color in architecture is a subject which is more and more interesting to the profession and especially so to the men whose livelihood is dependent

upon their knowledge of color in rendering.

The New Year is a good time to turn over a new leaf. We take pleasure in announcing that beginning in the January issue and continuing throughout the year, we have resolved to provide our readers with two new "leaves," showing the finest renderings in full color. The subjects will be selected from the work of representative men in the field, and will be faithful reproductions in the colors of the original rendering.

Other new features will be incorporated as our work develops. We will seize upon every idea which will enhance the value of PENCIL POINTS so that it may be representative of the best thought and achievement in architectural practice.

We will try to remember that architecture reaches to greatness in the healthy state which has learned and assimilated the principles of decent living and accepted the moral responsibilities for the amenities of life.

PENCIL POINTS
extends to you the
Compliments and Best Wishes
of the Holiday Season
Christmas, 1925



CAMERA STUDY OF THE NEW YORK PUBLIC LIBRARY
By Kenneth Clark

OFFICE PRINCIPLES, POLICIES & PRACTICE

A Reprint of a Booklet written by H. Van Buren Magonigle for the guidance of his Drafting Room,
familiarly known as "The Boss's Bible".

FOREWORD: We spend a third of our days here, the most important part of our daily lives, and I want it to be a pleasant place for all of us. I want to feel, and want you to feel, that we are all friends working together for one end—to do good architecture. I want you to feel at home here while you are here. And I believe that you will feel at home more quickly if you know what the conditions here are.

First let me say to you that, from all I can learn, a misconception seems to exist as to what the office policies are, what I expect from a man and the like. I have gathered the impression that when a man comes into the office he feels more or less up in the air and his sense of initiative becomes stifled or is abated and that this is partly because I am so very particular and take such an intense personal interest in every detail of the work that the fellows are afraid to go ahead and have a sort of vaguely rattled feeling. Why this should be so I can't fancy, but it has been made evident to me so many times that it is high time for me to state my point of view clearly.

There is hardly any quality I prize above initiative. I want you to have it. It is invaluable to you and to me.

You on your part will realize I hope that architecture is as intensely personal a matter as sculpture or painting and vastly more difficult because one man can't do all of it with his own hands and has to do the greater part with the assistance of his draftsmen. Therefore while you are in my office, it is essential that you should do the *kind* of thing I like—and I like many different kinds of things—simple things, rich things, picturesque things and very quiet sober things. And I try to choose the right parti among these for the problem in hand. I do not like flashy, or commonplace things. Every architect as he works and develops acquires unconsciously certain traits of style that run through all his work—predilections in favor of certain profiles as against others, combinations of profiles, a characteristic line or twist in ornament, a certain quality in composition, in plan and elevation and in the disposition of light and shade, that stamps the work as his. It is for you, if a new comer, to find out as speedily as you can the kind of thing I like. I shall never begrudge the time you spend looking over the old drawings on file to find out—only, don't look *too* far back remember that a man's work insensibly changes and develops as time goes on.

I require that my work shall be well studied, soundly constructed, sacrificing neither the esthetic to the practical nor the practical to the esthetic. Clients as a rule know very little about

architecture, but they know, for example when a push button is in the wrong place.

But do not think for a moment that I want to stifle *your* invention, *your* sense of design, *your* practical ability. I welcome a fresh point of view. Now, it is very human to feel discouraged when your pet idea is turned down. Don't be! Get another, get some more, better and more acceptable to me.

You will grow in the process because your inventive faculty, your resourcefulness is put to the test.

Remember that there is nearly always more than one solution of a problem; you may find the best or I may; whichever finds it first, wins.

I don't want to design every smallest detail. I only reserve the right to change or modify your work if it isn't what I want. This fact should not make you feel helpless, discouraged or at sea. This should not make you wait for me to establish a character. That is for you to do, leaving your sketches loose and free for discussion. Remember that we often have to feel our way toward a solution. One cannot always visualize the thing at the start.

I want you to work *with* me as well as *for* me. I feel a strong sense of responsibility to you—for while an office is not a school in the formal sense, it ought to be in the highest and best sense, and I should like to feel that every man who passes through the office has gotten something valuable to *him*. And don't forget that if a man can learn from his chief, his chief can also learn from him.

Don't despise the practical side of your profession. Architecture is a plant of which the root is science—the flower is art. Neglect the root and what happens to the flower?

Don't despise the artistic side either, if you have a practical bent. Be a well-balanced man.

If you will constantly bear in mind that you are training yourself to become a practicing architect, you will see every day's work from a new and interesting angle.

Therefore learn to think and act as an architect, not as a mere draftsman. See your job in the big, as a whole, and see the part you are working on at any time in relation to the whole, in scale, in proportion, in light and shade, in color and in materials.

Learn to use materials properly—their characteristics, textures, possibilities of finish, their suitability for various uses, their limitations and

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their durability. Wherever you go, keep looking at them to see how other fellows have used them and how well or badly.

Remember the good old adage—"All work and no play makes Jack a dull boy." It is perfectly true that in the seven and a half hours of a working day it is impossible to learn enough about architecture for an ambitious man to make sufficiently rapid progress, and that some of his time outside the office must be given up to study. But not all of it. The ideal architect is a cultivated gentleman. Culture is not to be attained by the mere acquisition of facts but by the digestion and assimilation of a wide range of *ideas*. Architecture touches life at all points and unless an architect knows life, the life of the past as well as of his own time, his work will be lifeless, dry and juiceless. He must therefore be an omnivorous reader of great literature, fiction, essays, history and biography. He must therefore mix with the men and women of his time to know human nature, to be at ease in any society in which he finds himself thrown. He must cultivate the acquaintance not merely of men in his own profession but in other professions and occupations and get their points of view. He should hear good music and go to the play. He should see and study good pictures and sculpture. And he should not neglect his body while storing his mind. Take plenty of exercise and keep the blood buzzing through your body. And at all times, in and out of the office, whether working or reading or mixing with people or doing any one of the many things an active mind suggests, **have a good time!**

Any man who says he hasn't time to carry out such a program, I would refer to the example of Theodore Roosevelt who found time to read books, write several, take lots of exercise and all the time be very much President of the United States. We can't all be T. R.'s but his day had only twenty-fours in it just like ours.

When you are working with several others on a job, get to know as much about the job as you can. Don't become so absorbed in the part you are doing that you lose touch with the rest. The part you are doing is no more important than any other part—it is only a part and it has to fit the other parts. Some men fear that if they leave their table they'll be accused of loafing. Now there are four types which the experienced architect picks out in a very short time.

A. The honest, serious, conscientious man who buries himself in what he is doing and barely budges from his table.

B. The man who rarely leaves his own place but makes a pretense of being very busy, and thinks he gets away with it.

C. The man who is nearly always at someone's else table for any one of a dozen bad reasons.

D. The man who is thoroughly interested in his own work but is also interested in the job as a whole, who isn't afraid to leave his table if he wants to and needs to for any one of a dozen *good* reasons. Who knows in a general way what else is going on in the office and yet manages to get his own work done.

If a man wants to loaf, let him loaf with his head and tail up—openly and frankly *loaf*. But let him never soldier. Loafing *may* be resting, but soldiering is "not cricket".

Cultivate a sense of proportion between effort and result. There is a type of man, who, if he has the plan of a room to make at $\frac{3}{4}$ " scale draws the plan of every window box with every tongue and groove and shows the weights. Another type delights in the endless repetition of some insignificant detail. Others waste hours in elaborate lettering instead of clear simple titles.

Methods and customs are not absolutely inflexible; they must change from time to time if there is to be any progress or growth. But it is essential to the success of the work of the office that certain things be done in exactly the same way by all of you, until some better way is devised. Suggestions for improvements will be welcomed and considered. They should be reduced to writing and dropped in the suggestion box.

Office Hours: Office hours are from 9:00 to 5:30 P. M. for five days of the week. During June, July, August and September the office is closed on Saturday. Through the other eight months Saturday hours are from 8:30 to 12.

A reasonable adherence to these hours is of course expected. No office can be run with any degree of efficiency if the men straggle in at all sorts of hours. I recognize that the exigencies of the work may detain you after hours and that there must be give and take. But you must not habitually come late and habitually make up the time at the close of the day.

Holidays: The following holidays are observed: New Year's Day, Lincoln's Birthday, Washington's Birthday, Decoration Day, Fourth of July, Labor Day, Columbus Day, Election Day, Thanksgiving Day and Christmas.

Vacations: The vacation period ranges from July to October inclusive. A man who has been here for six months or more prior to July 1st is entitled to a vacation of one week—if for a year or more, to two weeks.

Salaries and Overtime: Salaries are paid monthly on the following plan: You receive a certain fixed salary each month. Overtime is paid for at the regular hourly rate plus one hour's time for dinner. Your hourly rate is determined by dividing your annual salary by 2015, the average number of working hours per year. Your regular salary and the total overtime, if any, are then

OFFICE PRINCIPLES, POLICIES AND PRACTICE

added together; absence is deducted for at the hourly rate; in case a man has had no overtime in the month, he is paid his full salary and permitted to make up absence the next month. If he has had overtime, the amount lost is deducted from his overtime.

A raise in salary is a recognition of increased ability and is not given "because I haven't had one in a long time". There may be, and usually is, a reason.

Telephone Calls: Please pay Miss Jones for all personal telephone calls at the time of the call.

Library: Use the library freely and keep freshened up. I only ask that you treat the books carefully and with respect. It is not merely their cost—no lover of books will abuse one. Piling them **open** one on top of another on your table, soiling or tearing the pages are high crimes and misdemeanors.

Return all books yourself to their exact and proper places at the end of the day.

Files: No one except the person in charge of the file-room is permitted to take a drawing from or return it to the files.

No one in the drafting room is permitted access to the correspondence files under any circumstances whatever.

General Advice: Co-operate with the man in immediate charge of the work you are doing. Remember that you may be in charge of a piece of work with him to assist you some day. Do your best to maintain pleasant relations with the other men in the office and remember that after all the work and its success is the thing.

Use your head.

Be thorough.

Take nothing for granted—check it up or look it up.

When you don't **know**, ask or look it up.

When you are not **sure**, ask or look it up.

Remember that it takes less time to do a thing right in the first place than to correct mistakes.

When in doubt don't leave out. Too much information is better than not enough—but find the proper mean.

Keep clear and explicit written notes. Don't trust your memory. A piece of paper and a pencil beats the best memory into a cocked hat. But don't spend all your time making notes. Be enthusiastic about it, but reasonable.

Don't duplicate your own efforts as you work nor those of other men. Before you begin a piece of work **make sure by asking** whether anyone has tackled it before and just how far he got.

Don't be afraid to ask questions of the proper person at the proper time. When you are absolutely tied up is one of the proper times. Don't keep running to me or to the man in charge of the work to ask questions. As they occur to you while you work, write them down and submit them all at once for settlement. This saves time for everybody.

Do your own thinking—and when you strike a snag, don't put it up to me or **anyone else** to do your thinking for you. Reason out for yourself the best solution of the trouble you can and give the results of your thought, **not of your failure to think**—And when you reason be sure your premises are correct.

Learn to think of architecture in three dimensions.

Take pride in making your work cost the office as little as possible.

Keep track of your time on everything you do and make the time bear a proper relation to the commission that will be received for it and remember that every hour you spend on it carries an overhead charge.

Sordid as it may seem, an employer weighs his men according to their productivity. And when the pay roll has to be cut down it is the unproductive man who goes first, not the man who does the most work at the least cost in time and in worry to the Boss. Never fool yourself by thinking, "I may be slow but I'm good". If you are slow you may be good, but not as good as though you were good **and** rapid. Rapidity and accuracy are the result of clear thinking, concentration, and the co-ordination of brain, hand and eye. If your brain works slowly don't admire it just because it is yours.

Ask yourself how much time you waste in the course of the day, by thoughtlessness or carelessness or forgetfulness or unnecessary repetition or marking time or soldiering or supplying the paper factories with the finest pulp or oratory or argument. Such time is paid for in money and if all the time wasted in such ways in all the offices in the country could be estimated in dollars and cents the total would be enough to found a home for indigent architects.

Try to keep your place in order. Don't let stuff accumulate in it. The place for waste paper is in the baskets not on the floor.

Drawings and Workmanship: Take good care of drawings. They have to be printed from and must be kept clean, untorn and uncrumpled.

Draftsmanship, meaning the ability to express architecture in black and white, clearly and cleanly, **is expected** of every man in the office. Messy, careless, sloppy, dirty drawings are not tolerated because there is no excuse for such work.

PENCIL POINTS

It is just as easy and takes no more time to make a clean, clear, well arranged drawing than a dirty, mixed-up one. Strike the happy mean between the old maid and the slouch. It is just as easy and takes no more time to draw a clean, good line than a ragged and sloppy one. A well-sharpened pencil with a symmetrical point is the first step toward a good line.

Your draftsmanship should be suited and adjusted to the kind of work you are doing. The pencil you use and the line you make for small scale drawings are not the ones for full size. The same applies to sketches and working drawings.

It requires the exercise of good judgment to make the right kind of drawing for the particular purpose for which it is intended.

When you begin on a job already started but new to you, the first step is to examine the general drawings and specifications to get the relation between what you are about to do and the rest of the job. Don't go it blind.

When you start a new piece of work collect your information as to the practical requirements as soon as possible.

There is an information book which gives all sorts of practical information. This is in charge of who keeps it up to date. Consult it freely. If you have an unusual condition not covered by the information book, he will get it, give it to you, and record it in the book.

There is also a book containing profiles of trims, bases, cornices, etc., details of window boxes and frames, etc., etc., of all sorts and kinds. They are all good. Except for very special rooms, consult the specifications, see what will comply and get me to decide which of these I prefer to use.

Don't work too close; allow reasonable play between rough work and finish. To be stymied for an eighth of an inch is absurd. With the best of care the building will vary from the drawings and this must be discounted in advance.

Sketches and Studies: Sketches and studies are sketches and studies, not pictures.

Sketches and studies are for the purpose of establishing general forms and shapes, scale and composition. They should be free, rapidly drawn with a soft pencil. If they have an interesting and sympathetic quality so much the better. But that quality should be a by-product not an end to strive for. Think of them as architecture not as drawings of architecture. Think of the thing to be built not the instrument.

While in studying something, for example a doorway, you need and I need to see it in its entirety in order to judge of proportion, scale, etc. But the builder in ninety-nine cases out of a hundred needs only a partial elevation. Therefore, when you and I have settled on the study what it is go-

ing to look like and you proceed to translate your study into a working drawing, give the builder only what **he** needs.

When you have made studies for anything and are interrupted, or the work is deferred, turn the studies and data over to the man in immediate charge of the work. Don't let them get buried in your alcove.

Working Drawings: Working drawings are neither studies nor sketches nor pictures—they are working drawings.

A good working drawing is that which gives the builder exactly the information he needs to build from, no less and **no more**.

It must be clear and clean and simple.

It must be arranged in an orderly and readable manner on the sheet.

It must be accurately drawn so that scaled measurements will agree with figures.

It must present the essentials and nothing superfluous.

It must avoid unnecessary repetitions.

All titles for drawings must be explicit and comprehensive but brief, so that the title, copied on the index to drawings, will tell exactly what the drawing covers. A good short comprehensive title is hard to compose. Learn to do it.

All **final** drawings are to be placed upon a sheet of a size standard for that job. No drawings of odd and fragmentary sizes are permitted. In every set there should be provision for sheets for the miscellaneous drawings and details that are inevitable. These sheets, with border lines ruled and certain titles printed are kept in the file room.

Working Drawings.

Quarter Scales: In beginning a set of $\frac{1}{4}$ scale working drawings the first thing to do is to list up the number and kind required. The next step is to settle the size of the sheet which will be standard for the job and how the drawings may be best arranged on them.

The next is to lay out the key plan on bond paper, copying the sketch plan with all its faults and inaccuracies.

Don't try to correct and adjust as you go along.

(For a building standing free, without lot-line restrictions, work from the inside out—that is, from finished dimensions of rooms. With lot-line restrictions work of course from the outside in.)

Having laid out the key plan, go over it to see where things are tight and cramped, where space is wasted, whether sufficient allowance has been

OFFICE PRINCIPLES, POLICIES AND PRACTICE

made for wall thicknesses, furring and the like, examine axes and see what would follow from shifting any of them.

Get all this firmly fixed in your mind. Then pick out the best place to begin adjusting and proceed to adjust in a broad and general way, avoiding minor details like the plague—(I mean for instance, figure out what the total thickness of outer walls will be from plaster to outer face, but **don't draw** anything but the inner and outer lines at this stage; indicate windows with four lines—two showing the width and two showing the box.)

Then lay out **all** the other plans, **all** the elevations and **all** the sections in the same general way. These should all be quickly done with just enough accuracy for this preliminary stage of the work, which is for the purpose of finding out where the snags are (sections, plenty of them, are great snag-revealers) and getting everything moving and brought up to the same point of progress.

Unless the job is in an unusual hurry, the man in direct charge should do all this work or at the most with one other to help him.

At about this point the client is usually to be consulted and further adjustments and alterations made.

Then get prints of these drawings for tentative steel, heating and ventilating, and while these are in the engineers' hands, utilize the waiting time to collect data on plumbing fixtures, electrical work, elevators, dumbwaiters, kitchen and laundry equipment, etc., etc. for future incorporation in the drawings. Up to this time everything is loose and free, nothing really settled, nothing perhaps absolutely accurate.

By this time these preliminary drawings will be covered with free hand notes, column centres closely approximated, ducts shown free hand with sizes marked, approximate position of rising lines for heating, soil pipes, electric outlets and the like.

Go over them carefully to see what effect this or that will have on the architectural appearance, interior and exterior, and what sort of adjustments must be made. Then start a fresh set of drawings on bond paper carefully and accurately drawn, filling in details in the order of their importance and nailing down important or complicated dimensions as you work.

Keep all drawings going in this set as in the preliminary set. Don't show all the ducts carefully and finally on the first story and then find out that some of them have to be changed on account of basement or upper story conditions, or because you didn't know that a structural member would run through it. Don't show W.C.'s carefully and finally and find that the lead bend comes smack over a steel beam.

There are a lot of such don'ts. There will be no excuse for such occurrences because all such conditions should have developed themselves in the preliminary drawings.

For certain types of buildings this set on bond paper will be the final set. For more important buildings they will be traced on cloth.

This must be decided at the time the second set is started—for if they are to be traced on cloth there is an immense amount of work that can be put straight on cloth and thus avoid an enormous amount of unnecessary repetition. For example: Door swings have been established, probably freehand, on the preliminary drawings—**don't repeat** them on the second set and then trace them all over again on cloth. Duct sizes have been marked on the preliminary drawings—unless changed to accommodate the structural or finish conditions **don't repeat** them on the second set and then trace them all over again on cloth. **Don't repeat** notes taken from the preliminary set on the second set and then repeat them again on the cloth set. All indication of material will be drawn on the cloth.

We now come to a very important stage—the placing of notes and figures on the drawings. Take one room in a building as an example—it may have the following and more, in it or in the walls. Floor plugs, base plugs, bracket outlets and ceiling outlets with their wattage, switches, push buttons, thermostats, vacuum cleaner outlets; radiators or registers with their sizes; ducts with their sizes; rising heat lines; soil pipes; chases; figured dimensions; the name of the room and its number; the numbers of the door and window openings! notes as to special conditions. To arrange all this mass of material so that it is all legible and clear, so that notes don't come just where dimension lines and tick-marks are, and so that the room is not so cluttered up with it that one can't see the room, takes thought and care; it can't be done hap-hazard.

Working Drawings.

Lettering: Lettering must be of moderate size, clear, compact and distinct. Avoid eccentric, affected or fantastic lettering.

Working Drawings.

Figuring: Now as to figuring: One of the most difficult things a draftsman has to do is to figure a drawing simply, clearly and properly. The tendency is to give too many figures, multiplying the chance of error.

Make your figures of moderate size, clear, black and distinct, and if fractions must happen, don't make them of microscopic size, just because fractions are smaller than whole numbers.

In laying out a plan we of course work from main axes and from finished dimensions. Establish these figures for your own convenience and that

PENCIL POINTS

of others as you work, but when you figure the plan finally, figure from rough to rough, remembering that brick walls are built first, tile or stud partitions thereafter and the finished work is installed last. Remember that in a frame building the frame is erected before the chimneys are built.

In general, figure from center to center of openings, interior as well as exterior. Partitions are to be figured from side to side.

Totals are essential.

Fractions are to be avoided wherever possible. If you get eighths of an inch your figuring is wrong somewhere. Find the hair and pull it out.

Working Drawings.

Notes: Don't be afraid of putting notes on drawings. Notes clearly worded are invaluable. But be sure they are clearly worded and tell exactly what you mean—and be sure you know what you mean. An ambiguous note can make more mischief than none at all.

A great deal of repetition may be saved by general notes, which should be assembled in one place on the sheet. For example, it is the common practice to figure the size of every door at every opening; doors may be usually divided into two or three types as: Room Doors, Closet Doors, Double Doors. A general note stating that "except where otherwise specially noted doors will be of following sizes: Room Doors 3.0x7.0, etc." will suffice and save an immense amount of time.

Details: Rough out details on tracing paper. If you are studying the four walls of a room, work them up over each other, and then assemble them on the final sheet. **Don't make completely finished drawings on thin paper and then trace them all over again on the final sheets.** If you indicate materials on the preliminary studies, do it free hand. This method of working, if intelligently carried out, is a great time-saver—if unintelligently, it is the worst time-waster I know of.

The theory is that it is difficult to plan out the position of the various necessary plans, sections and elevations that go to make up a finished sheet in advance with the greatest clearness and without loss of space. But if they are roughed out on separate pieces of thin paper, the latter can be arranged logically, clearly and in a much condensed form within the border line of the final sheet. Lots of men completely misunderstand this very simple method, which doesn't take the brains of a Michael Angelo to grasp.

When you have a close condition rough it out at full size to make sure what you propose will work, **and save the full size study.** In certain cases you may find it advisable to make a number—so that by the time the scale detail is complete the job is almost full sized also. Then assemble them on a final sheet.

A detail to be sent to a country carpenter must usually show construction, whereas to show construction on one to be given a first class cabinet maker is simply waste of time. Use judgment about such things.

When you are full sizing, rough out the profiles, getting the main facts as close to what you think I like as possible and submit them in that form. Don't submit finished drawings; they may be so modified in some part that everything else is affected. As to ornament remember that you are ornamenting construction, not constructing ornament—it is the profile that counts; get the profiles right and then we will decide what ornament is suitable for those profiles.

In making drawings of an important room, remember that it is quite as essential to show the accurate locations of electric light outlets, switches, base plugs, floor plugs, vacuum cleaner outlets, thermostats and the like, as any other item of information respecting the room.

Checking: When a drawing is finished as far as you can carry it, hand it over to the man in charge of the work for checking. When it has been checked it will be returned to you for correction if necessary. The moment you have corrected it, return it to him again.

You will be held directly responsible for the correctness and completeness of your own drawings. If your drawings are wrong the work will be wrong. The fact that they are to be checked does not relieve you then or thereafter of your responsibility.

Supervision: If you are sent out to superintend, observe the following:

Fill out your report blanks fully and clearly, remembering that you are the office eyes and ears.

Don't let anyone on the job get too familiar with you. Call anyone on the job by their first or last name, if you like, but don't give them a chance to call you anything but Mr. —————.

The contractor is not the natural enemy of the Architect. Be just, fair, and firm with him and his men.

Keep your temper. It is well sometimes to show righteous wrath—but do it deliberately and with purpose, not because you have **lost** control of yourself.

Don't neglect practical things for the esthetic or vice versa. Cover the job thoroughly. Make written notes as you go through.

It is impossible to state here everything to avoid or look out for. Therefore I say once more and finally, **USE YOUR HEAD!**

MASTER DRAFTSMEN, XVI

THOMAS HASTINGS

THAT an architect should always remain a draftsman, that he should continue to draw with T-square and triangle, and not fall into the practice of designing exclusively with a roll of thin paper and a soft pencil, is a conviction that Thomas Hastings reiterates and puts into practice. He has a room in the suite of offices of his firm where he works over a regulation drafting board putting in several hours a day usually no matter how many demands are made upon his time by the necessity for meeting those with whom he has business. It is in this way rather than in sketch form that he transmits his designs to his organization.

Hastings has always been a draftsman. When he was about nineteen years old he decided to prepare himself for entrance to the Ecole des Beaux Arts, in Paris and from that time he took up special studies, including mathematics, history and French one half of the day while working in an office the other half of the day. He continued this preparatory study for about a year and when he was twenty years old he went to Paris and entered the Ecole des Beaux Arts. There he became a student in the atelier of Jules André under whom Laloux, H. H. Richardson and many other of the most distinguished men had previously studied. At the time Hastings was in André's atelier Deglane and Redon were there as "*anciens*" and Hastings "niggered" for both of them.

Upon his return from Paris, Hastings, who was then about twenty-four years old, entered the office of McKim, Mead & White. There he became acquainted with John M. Carrere, who was supervising the work on a house that was being built in Baltimore, by McKim, Mead & White, while Hastings was working on the designs. He and Carrere found that they could get along well together and in about a year they formed the firm of Carrere & Hastings, an association that lasted until Carrere's

death in 1911. They took a small office in the building in which McKim, Mead & White had offices. They had a house or so to do and it seems also did some work occasionally for McKim, Mead & White.

Then came Flagler, who was a member of the congregation of which Hastings' father was the pastor, with the commissions that were to give the members of the young firm their first opportunity to demonstrate their ability as architects.

For Flagler, they built the Ponce de Leon Hotel at St. Augustine, Florida and the Alcazar Hotel at the same place. The building of two churches at St. Augustine followed, one a Presbyterian church, the other a Baptist church.

Upon obtaining the commission to design the Ponce de Leon Hotel, Carrere & Hastings required larger working quarters and they took an office on a more ample scale at 3 Bowling Green.

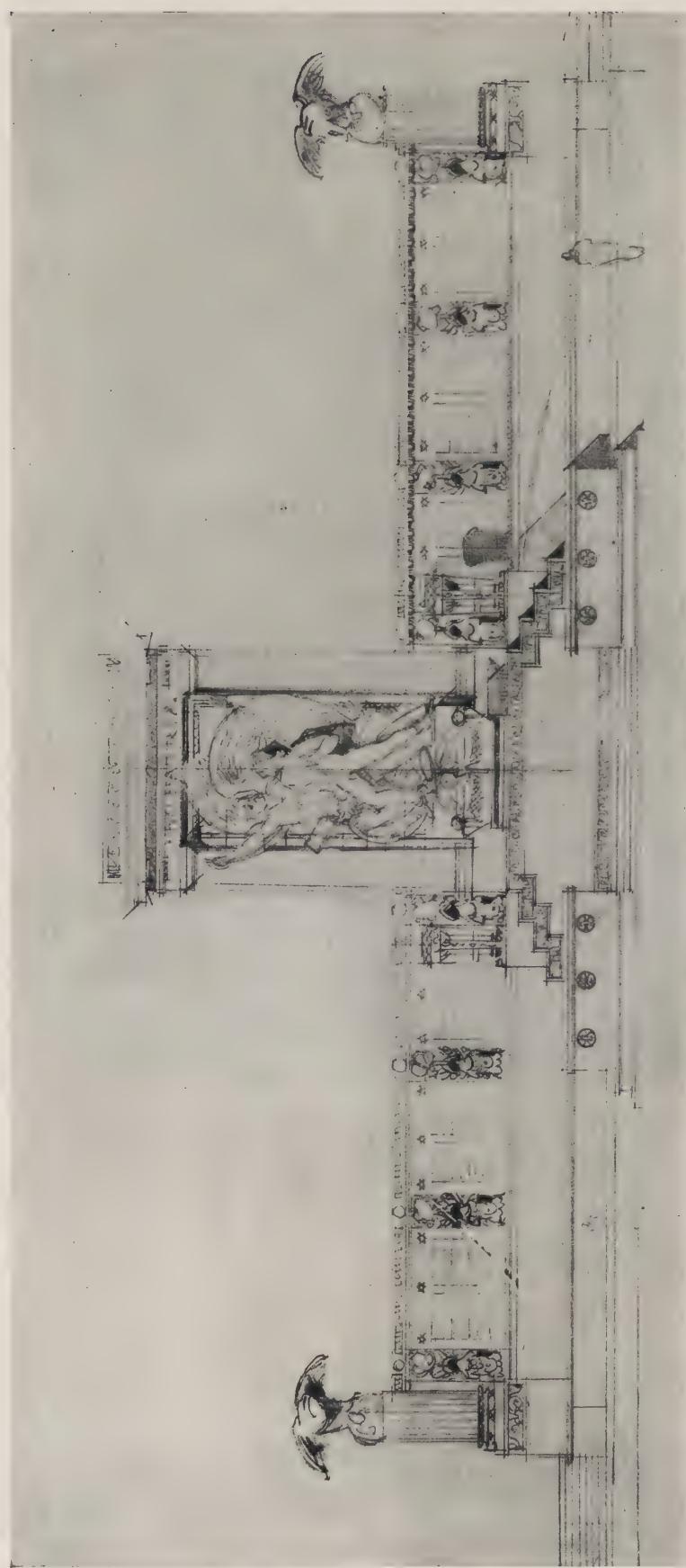
The next event of great importance was entry of the firm upon the competition held for the choice of an architect for the Cathedral of St. John the Divine. This brought out clearly the position Hastings has always maintained in the matter of design character or

style, for he firmly believes that we should solve our architectural problems in harmony with the traditions of our more immediate predecessors in the art,—that we are living in a continuation of the Renaissance and should not go back of that to the Gothic for inspiration or guidance. He feels strongly that to do so is unnatural, and not the right way to express modern life. He is an enthusiastic admirer of Gothic architecture, but opposed to attempts to work in the style today. Hastings is heartily glad that the architects of the Gothic period designed and built as they did, that they made their marvelous contribution to the art of the world as a true and natural expression of the life and spirit of their times. But he regards the Gothic period as a beautiful thing that is finished, and that we of today, should not revert. He feels

(Continued on page 60)



THOMAS HASTINGS



Drawing by Thomas Hastings.
EARLY STUDY FOR ALTAR OF LIBERTY FOR MADISON SQUARE, NEW YORK CITY

MASTER DRAFTSMEN SERIES—THOMAS HASTINGS



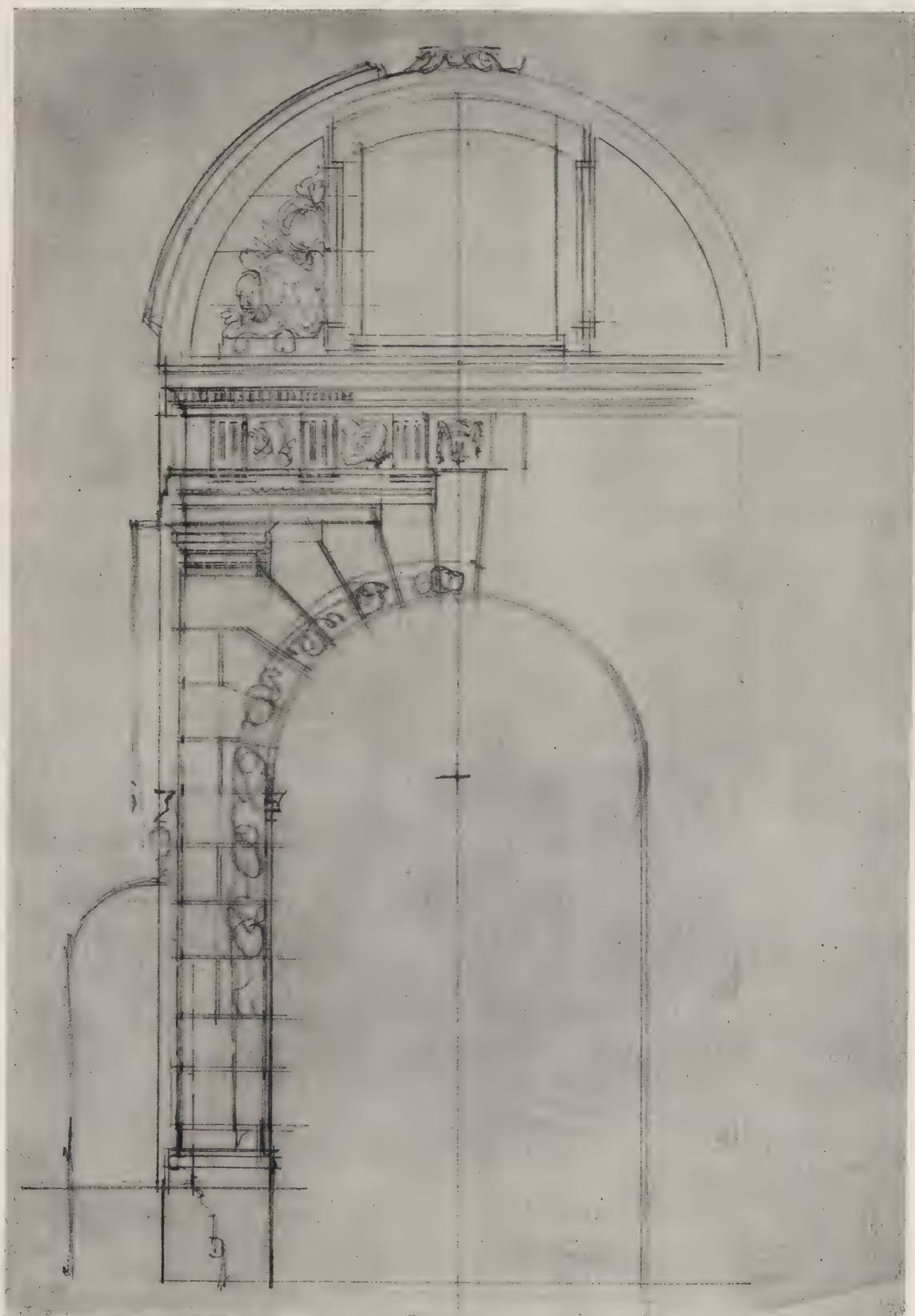
*Drawing by Thomas Hastings.
FLAG POLE FOR NEW YORK PUBLIC LIBRARY*

PENCIL POINTS



Drawing by Thomas Hastings.
ROUGH SKETCH FOR THE DESIGN OF AN OFFICE BUILDING

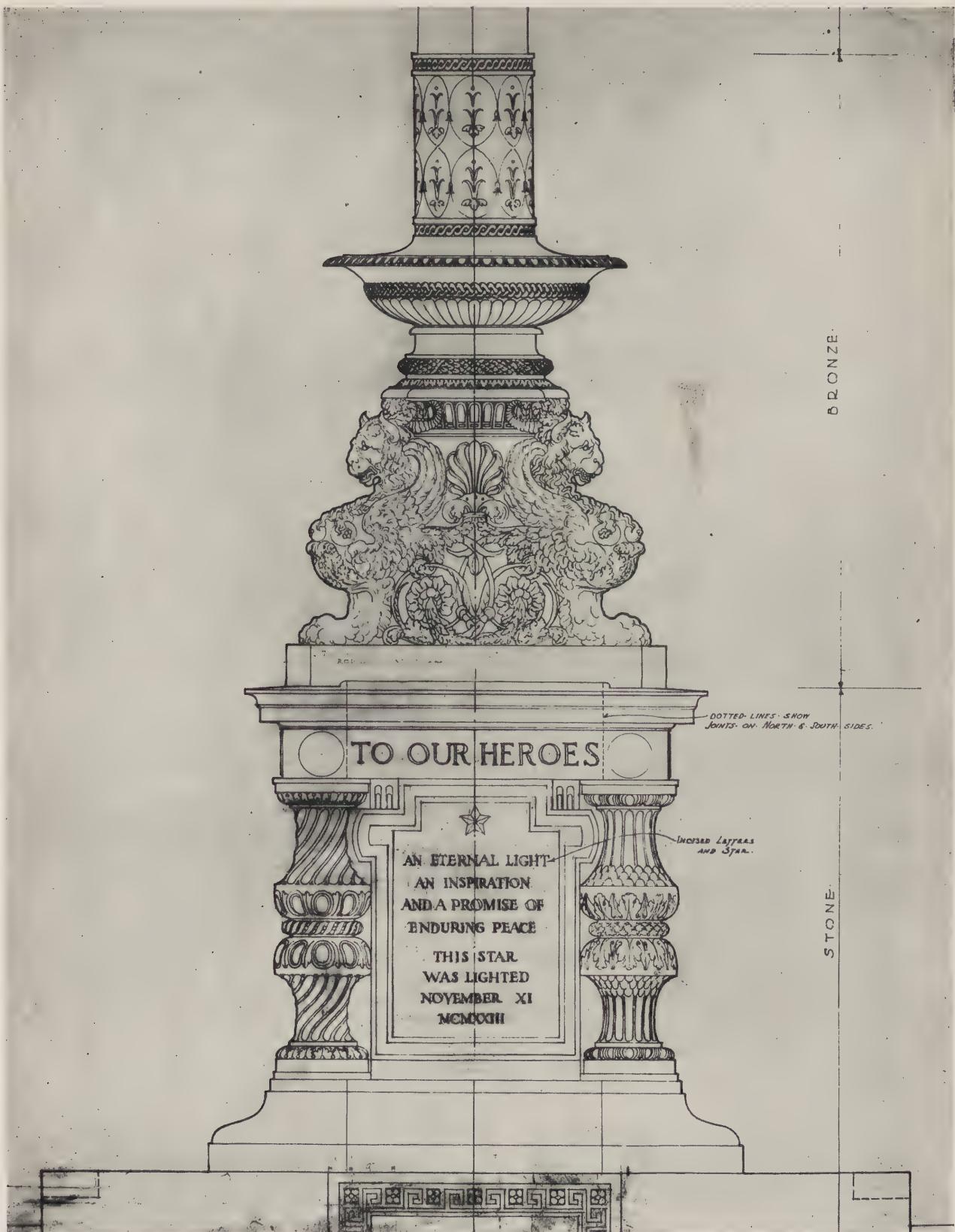
MASTER DRAFTSMEN SERIES—THOMAS HASTINGS



Drawing by Thomas Hastings.

EARLY STUDY FOR ENTRANCE OF THE STANDARD OIL BUILDING

PENCIL POINTS

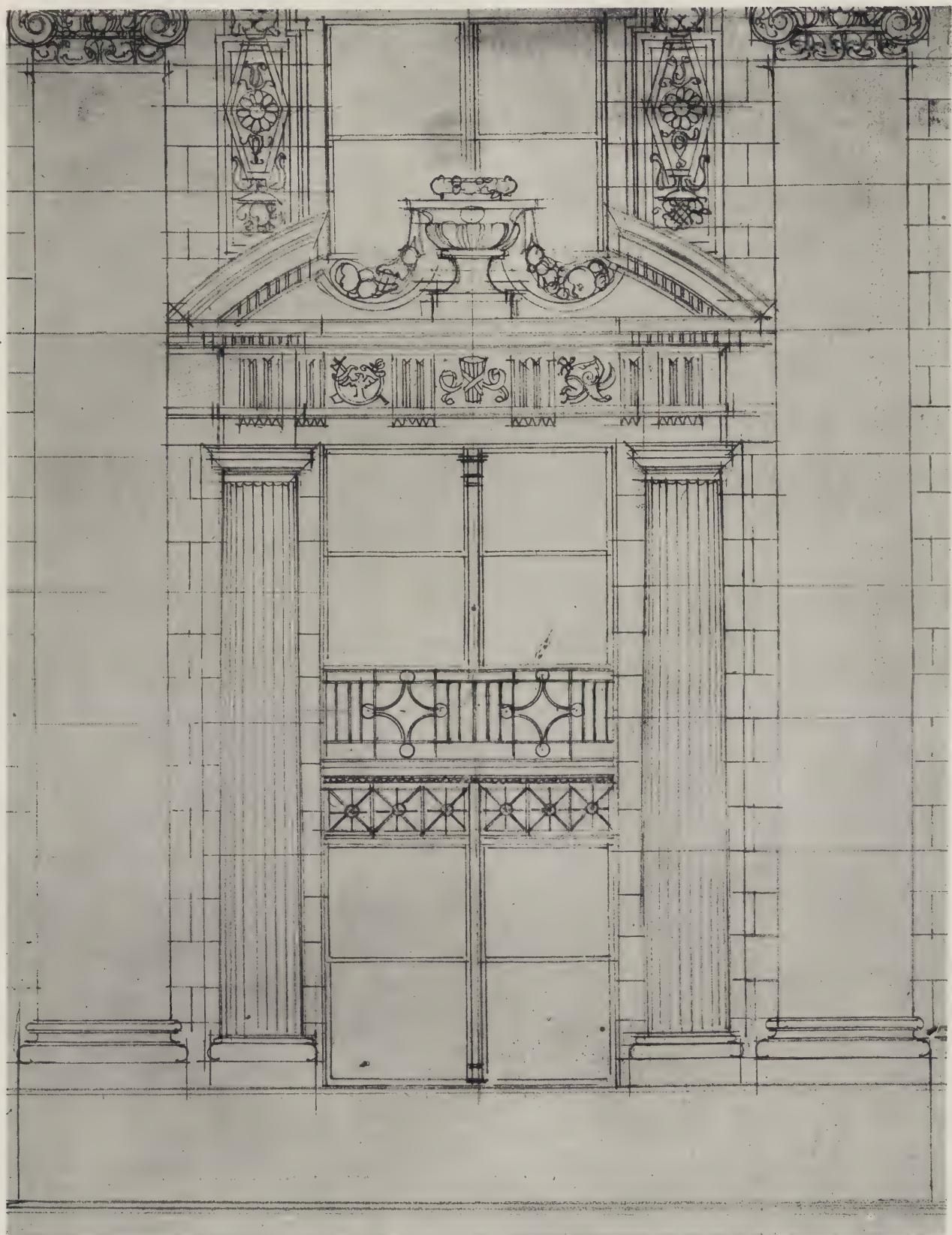


Tracing from a Drawing by Thomas Hastings.

DESIGN FOR THE FLAG POLE IN MADISON SQUARE, NEW YORK CITY

(See design for cap on page 60)

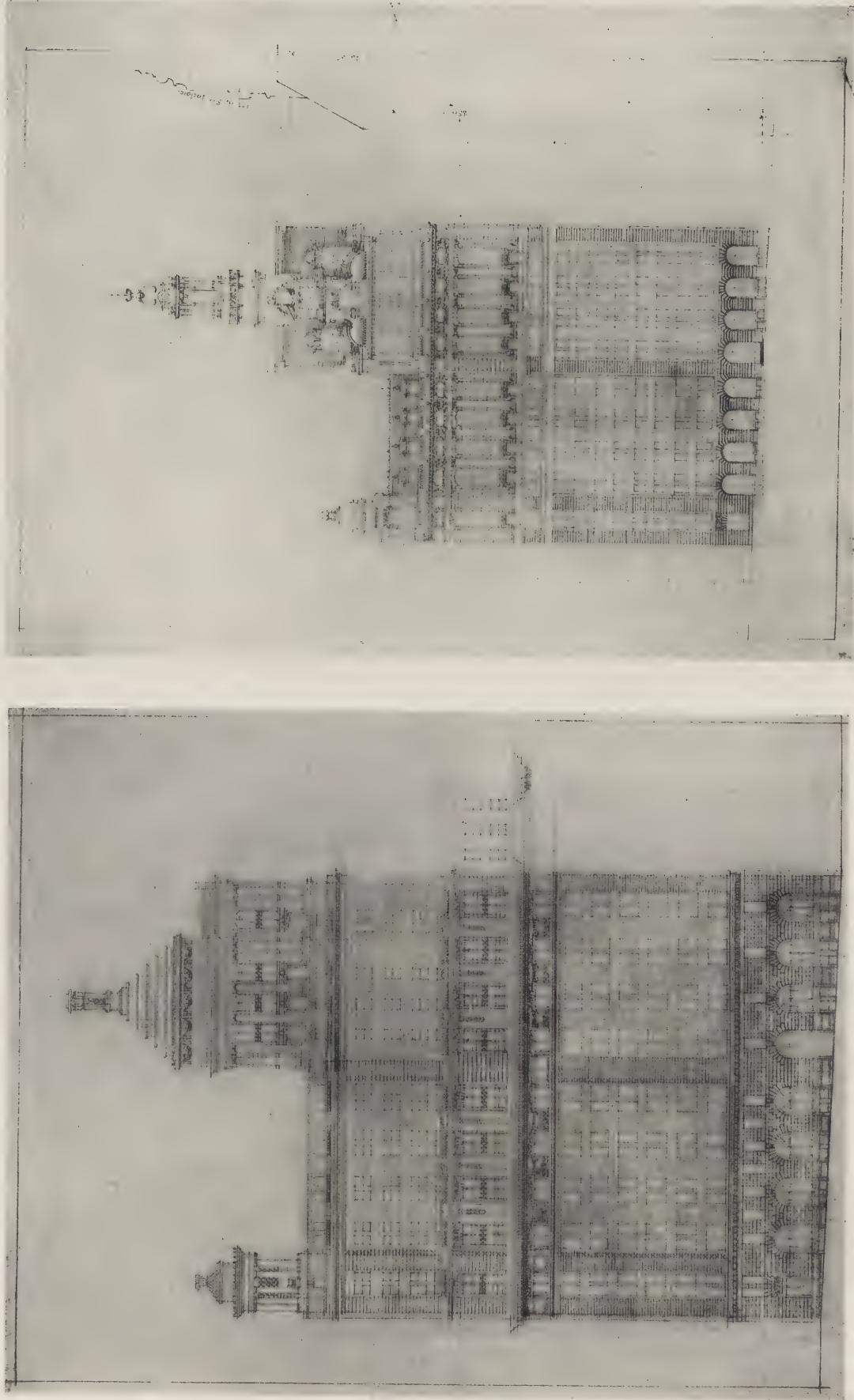
MASTER DRAFTSMEN SERIES—THOMAS HASTINGS



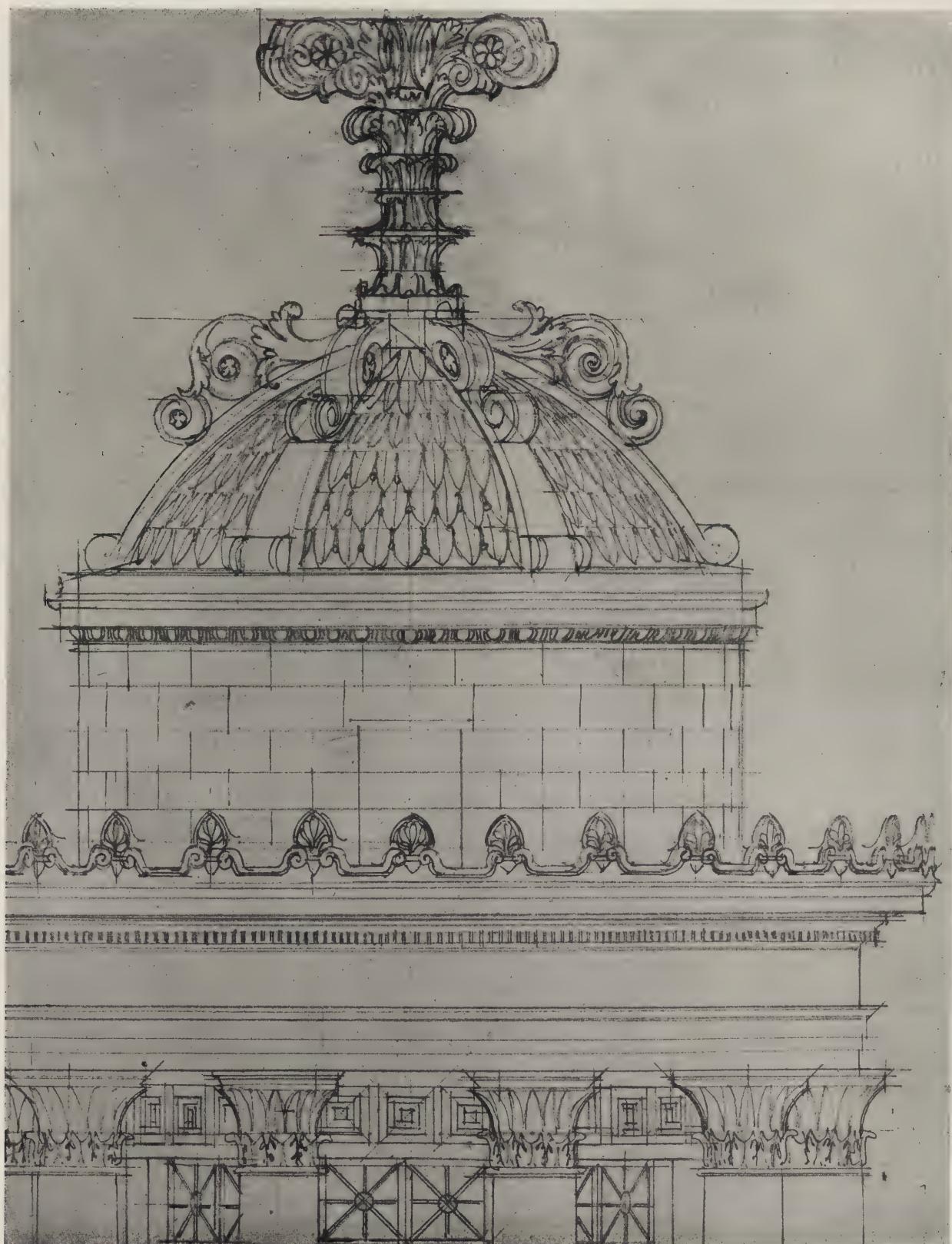
Drawing by Thomas Hastings.
DETAIL OF STUDY FOR AN OFFICE BUILDING

Drawing by Thomas Hastings.
STUDY FOR AN OFFICE BUILDING

Drawing by Thomas Hastings.
AN EARLY STUDY FOR THE STANDARD OIL BUILDING



MASTER DRAFTSMEN SERIES—THOMAS HASTINGS

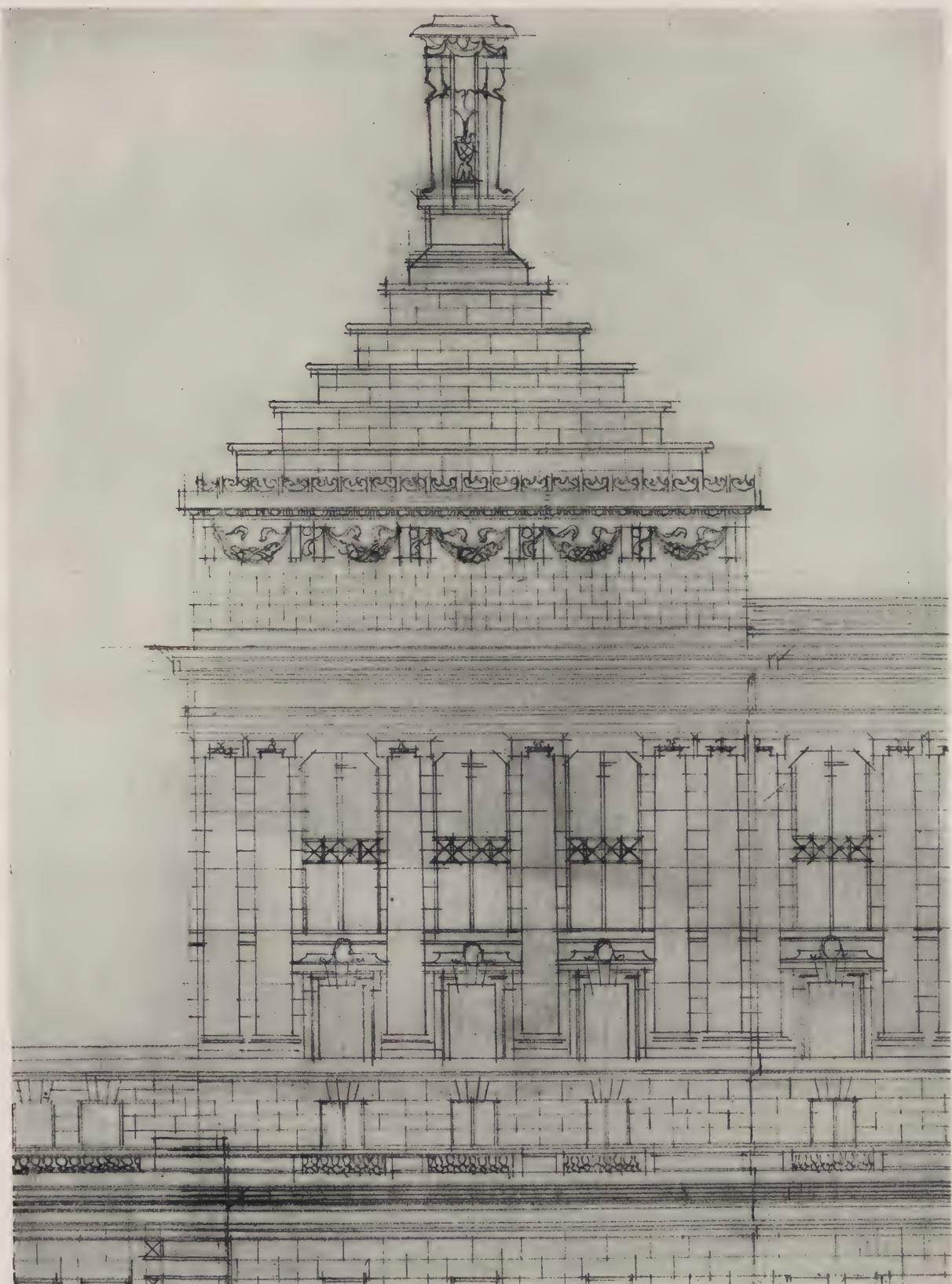


Drawing by Thomas Hastings.

DETAIL OF EARLY STUDY FOR THE STANDARD OIL BUILDING

(A portion of drawing reproduced at the exact size of the original. See page 58 for reproduction of entire drawing.)

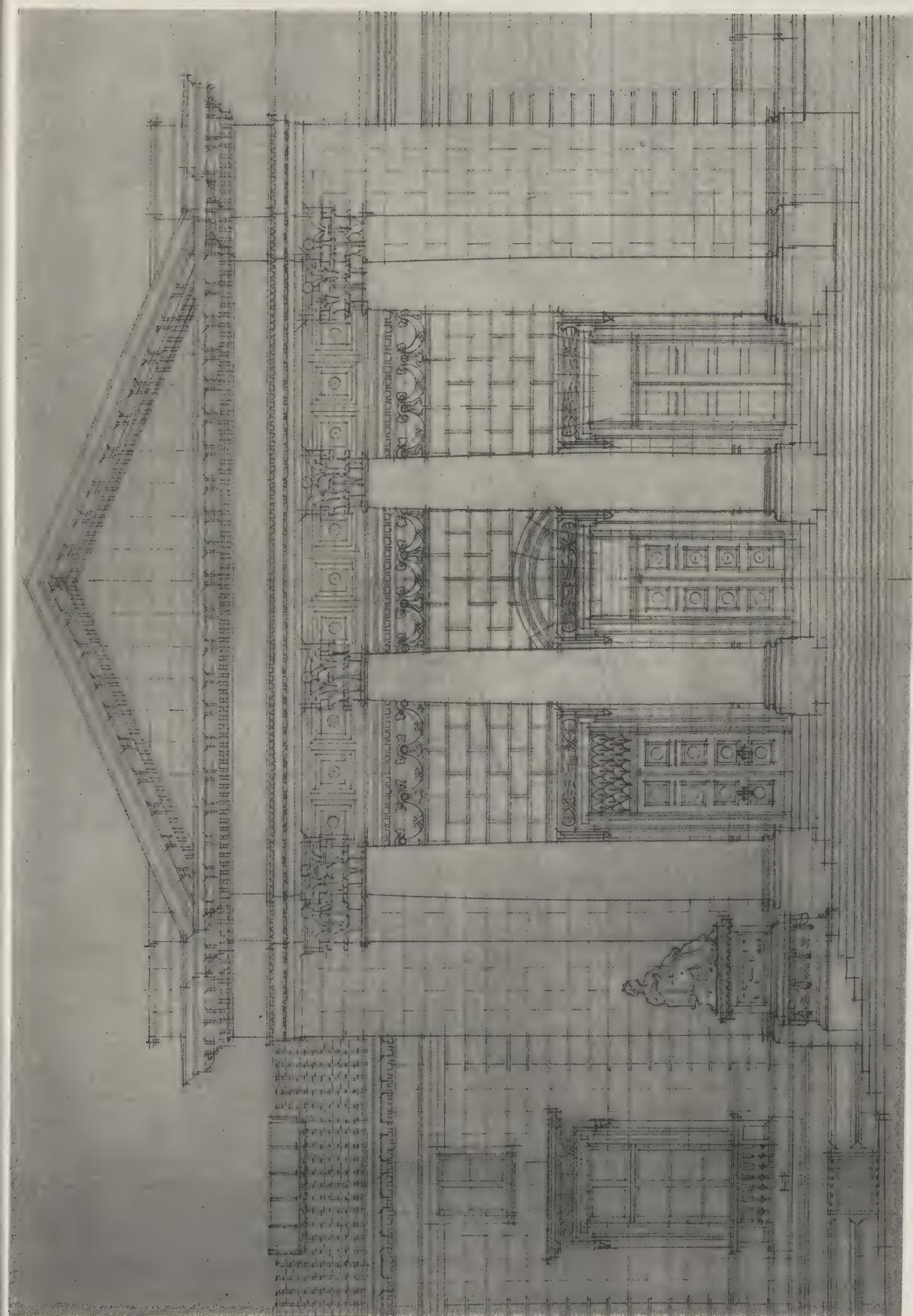
PENCIL POINTS



Drawing by Thomas Hastings.

DETAIL OF EARLY STUDY FOR THE STANDARD OIL BUILDING

(A portion of drawing reproduced at the exact size of the original. See page 56 for reproduction of entire drawing.)



Drawing by Thomas Hastings.

DETAIL OF FIRST STUDY FOR NATIONAL AMPHITHEATRE, ARLINGTON CEMETERY, WASHINGTON, D. C.

(Exact size of original. See page 60 for entire drawing.)

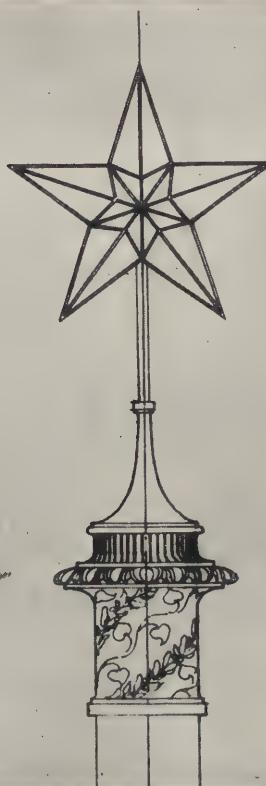
PENCIL POINTS

that Gothic is something we cannot do in the true spirit since our life is in its essence of Classic derivation through the Renaissance. In submitting the design of Carrere & Hastings in the competition for the Cathedral of St. John the Divine, Hastings made use of most of the number of words supposed to be devoted to a description of the design, as a means of conveying his objections to the employment of the Gothic manner in modern times.

After some years, the practice of the firm having grown, still larger quarters were needed and Carrere & Hastings removed to 44 Broadway. There they took the upper two floors of an old private house that was entered through 44 Broadway, an old fashioned office building.

The next high spot in the career of the firm was the winning of the competition for the New York Public Library. This brought about another removal of the firm's offices, for it appeared highly desirable that the offices should be uptown, where the work could be carried forward more efficiently. Consequently they took space at 28 East Forty-first Street.

As Hastings became more and more absorbed in the work he was doing personally, he found the usual



Drawing by Thomas Hastings.

DETAIL OF FLAG POLE IN MADISON SQUARE

(See drawing of base on page 54)

office hours to be inadequate so he fitted up rooms in the office where he could remain overnight. This was a delightful but strenuous method of carrying on his practice. The volume of work increased however until it became necessary for the firm to move to 225 Fifth Avenue where they occupied one half of the top floor of the Brunswick Building. They remained in these offices for a number of years and then Hastings moved uptown to his present offices at 52 Vanderbilt Avenue. Hastings has always felt a desire to be near his work at all times so he conceived the idea of having a "bungalow" on the roof above his offices which are on the top floor of the building.

Thomas Hastings has received many distinguished honors. He is an Academician of the National Academy of

Design, a Member of the Academy of Arts and Letters (Trustee of same), Member of the Royal Vienna Association of Architects, Member of Committee of Visitors to Columbia University, (Architectural Department). He is a Chevalier of the Legion of Honor, decorated by the French Government, has several times been a Director of the Amer-

(Continued on page 88)



Drawing by Thomas Hastings

FIRST STUDY FOR NATIONAL AMPHITHEATRE, ARLINGTON CEMETERY, WASHINGTON, D. C.

DESIGN IN THE DRAFTING ROOM

By JOHN C. BREIBY

FOR this paper in our series on design, we have selected an apartment house problem. The architect in this case was given the commission to design a number of apartment houses to be built in Florida. The commission was received direct from the client without a competition and without the necessity of making preliminary sketches, small scale drawings or an elaborately rendered perspective of the proposed scheme. The study of the design began after the commission was given.

The problem presented to the architect was to design the buildings and to prepare working drawings, etc., for apartment houses containing eight apartments each. Each of the buildings was to be two stories in height and no one of them might exceed 3,500 square feet in ground floor area. The apartments were to consist of three rooms and bath—living room, chamber and a combination dining al-

cove and kitchen. While the plans were required to be typical in general arrangement for all of the apartment houses under consideration, it was permitted to make slight changes in the arrangements of the window spacing, recesses for balconies, etc., to allow a certain amount of flexibility in the design of the facades for the several buildings. It was not absolutely necessary to consider the buildings in their relation to one another in group form, as they may be erected on single plots. The possibility of building the various units as one large group, however, was taken into consideration in the study of the whole problem.

Figure 1 indicates the required general conditions. Figures 2 and 3 illustrate the typical first and second floor plans which were developed after much study and thought and might be called the first "arrived studies," but they do not illustrate the final study of

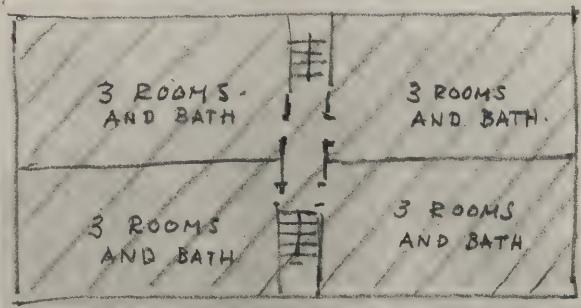
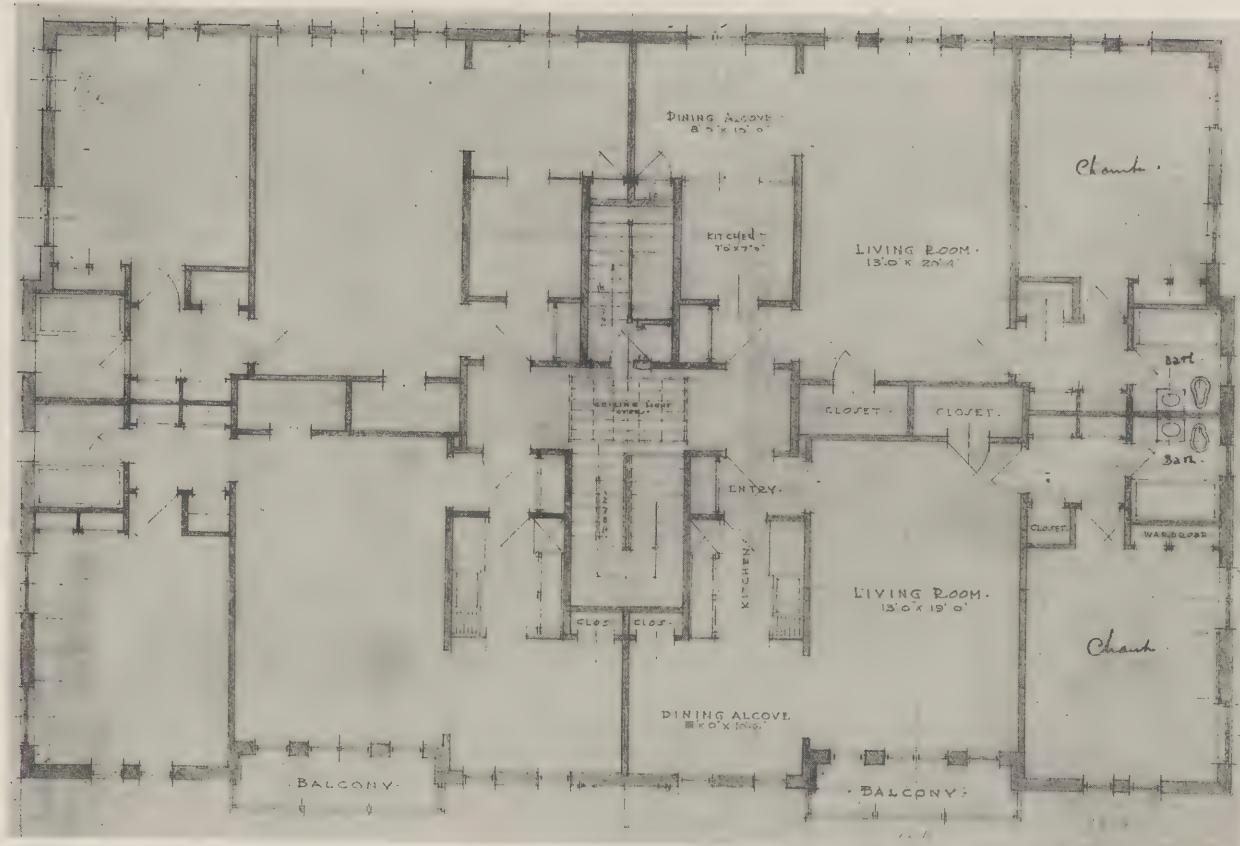


Figure 1

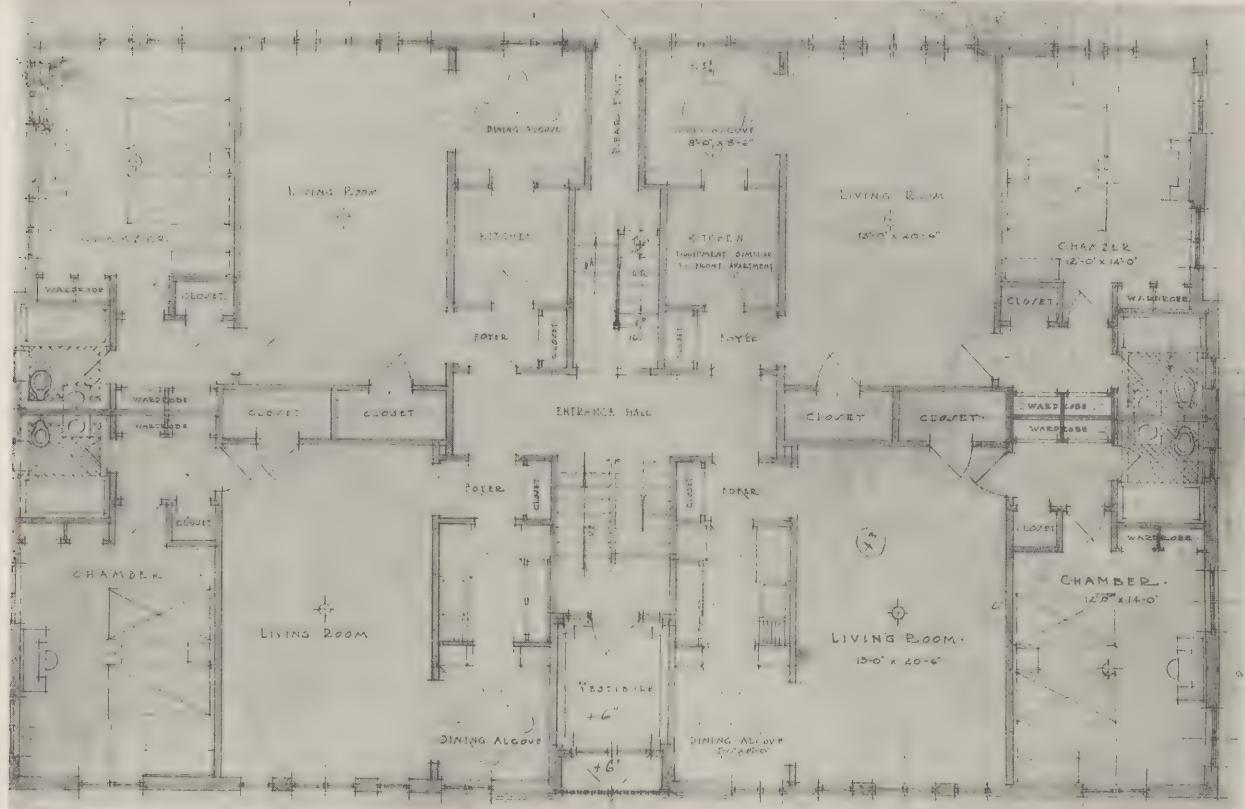


Figure 4

PENCIL POINTS



Second Floor Plan



First Floor Plan

DESIGN FOR APARTMENT HOUSE AT JACKSONVILLE, FLORIDA
HARRY CREIGHTON INGALLS, ARCHITECT

DESIGN IN THE DRAFTING ROOM

the plans. The progress or development studies of the plans are not shown nor are the later studies which have been made in connection with the design of the main facades.

The first general scheme for the front elevation of what I shall term "Building No. 1" is illustrated by Figure 4. The designer selected the architectural style which he deemed appropriate to the warm Florida climate and sought his inspiration from the buildings which have been erected in countries where the sunlight is strong and vivid. As the plan contemplates a symmetrical building, only half of the elevation was drawn for this preliminary study.

rendered drawing was made to show to the client, (Figure 8), so that he might be able to visualize the design more readily as a completed structure. This drawing also gave the designer the opportunity to weigh his design as a whole for light and shadow effects, values of colors, scale, etc.

The client was evidently a much traveled gentleman, for when he saw the design with its heavy arch treatment over the entrance door he made the amusing comment that it suggested to him "an entrance to a prison in Peru." This criticism necessitated a re-study of the entrance feature. A sketch flap was prepared which presented a new study, lightening-



Figure 5

It was felt that the first study of the design was a little too monumental and that the entrance door motif might be better if it were changed to the more charming and strikingly beautiful arch treatment so often seen in the buildings of old Spain. The developed or progressive study is illustrated by Figure 5. A rapid tracing was made of this study and "flopped" over and pasted to the other side of the sketch to complete the whole facade. The completed result is seen by the drawing reproduced as Figure 6.

A more careful line drawing was next made to determine the window sizes accurately, keeping in mind that only stock sizes will be used. The floor heights were determined and the balconies indicated clearly. This drawing is illustrated by Figure 7.

When the study of the design had progressed to this stage, a rather careful, though not laborious,

the character of the design and incorporating more color. The flap was placed over the drawing illustrated by Figure 8 and the sketch next shown the client for his approval was our illustration Figure 8a.

Light and air as well as convenient and liveable rooms play an important part in establishing the rental value of apartments. This is just as true in Florida as elsewhere, and the stipulation that the design provide as much light and air as possible was a constant consideration in the study of this problem. These facilities were amply provided in the so-called completed design illustrated by Figure 8, but the designer felt that by a little more study of the plans the dining alcoves or rooms could be utilized for loggias, thereby increasing the light and air in the apartments. The working drawings are now being made, carrying out this scheme or solution. Figure 10 is

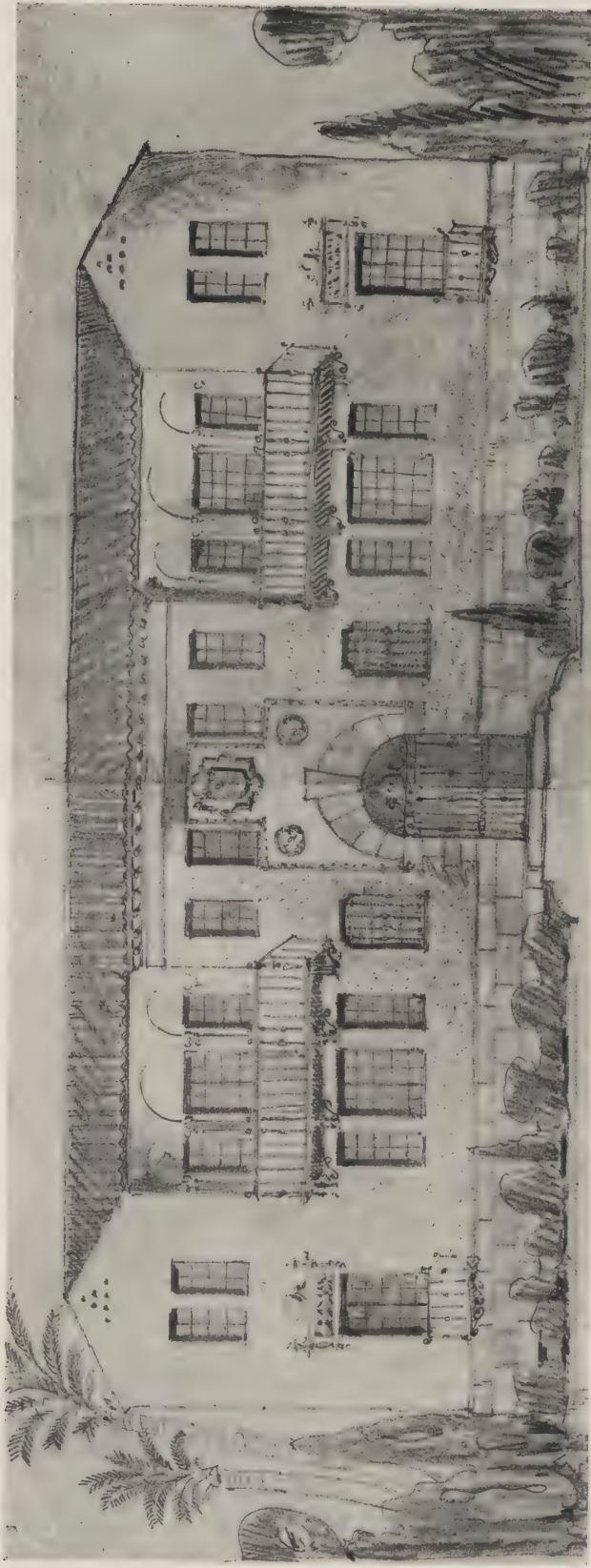


Figure 6

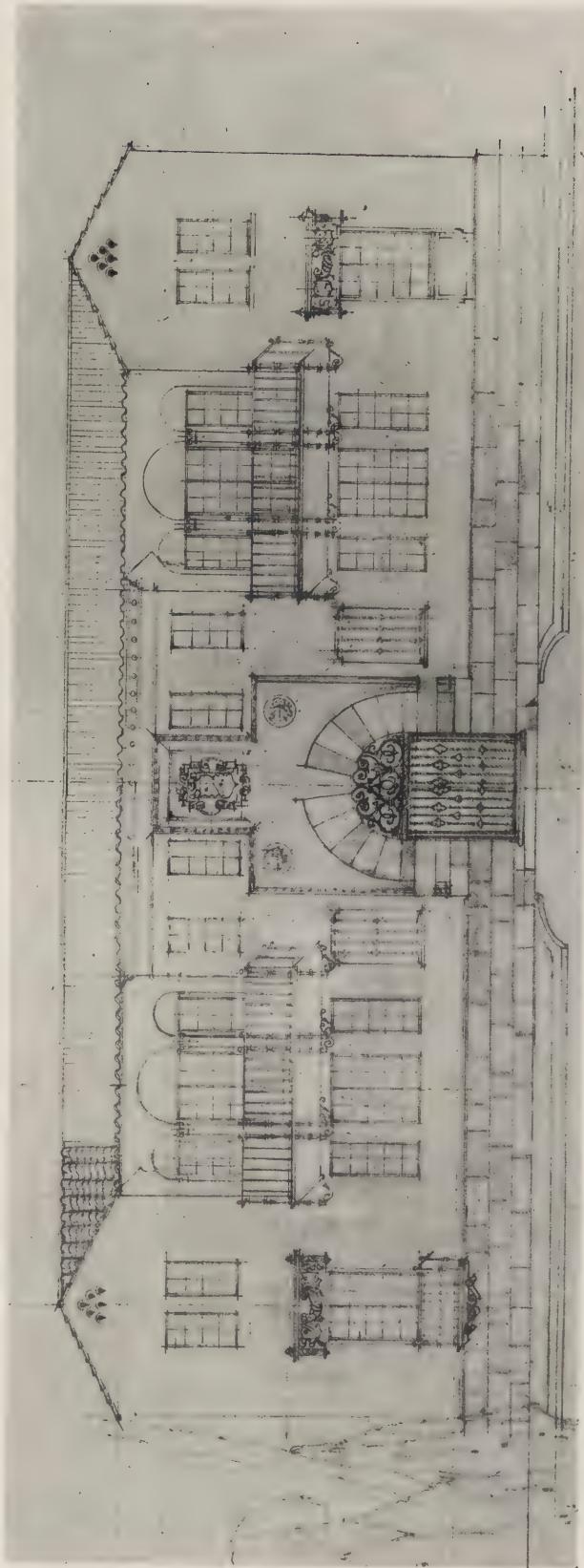


Figure 7



HARRY CREIGHTON INGALLS
Architect
New York City

ELEVATION - Two - STORY - HOUSE - No. 1 -
JACKSONVILLE, FLA.
HARRY CREIGHTON INGALLS, ARCHITECT

Figure 8

DESIGN FOR AN APARTMENT HOUSE AT JACKSONVILLE, FLORIDA
HARRY CREIGHTON INGALLS, ARCHITECT

PENCIL POINTS

a hurried sketch of one of the loggia treatments over the entrance door.

The rear elevation is shown by Figure 11. It is a fairly completed study which needs no special comment.

The sketches of the elevation were made at the scale of $\frac{1}{4}$ " equals one foot. The building is not large, and the whole facade could be studied at quarter inch scale instead of commencing the study at one eighth inch scale.

Two sketches, (figures 10 and 12) were made to suggest other possible designs for the apartments using the same type floor plans.

I have not attempted to give any rules which should be followed in making sketches or in develop-

or sections where careless speculative building operations are going on or have been completed.

I have mentioned the above especially to the family of "PENCIL POINTS" readers, for among us are many architects and draftsmen who accept commissions to make drawings for unscrupulous speculative builders and for real estate development companies. These classes of "clients" do not want the benefit of the designer's practical experience and knowledge of the right construction and the proper building materials to use. They realize that good design gives a definite, tangible and added market value to a building but they seem to think of the design as mere "stage scenery" which can be held in place by cheap and flimsy construction. The archi-



Figure 8A

ing the design in the drafting room. I have merely endeavored to show the general sort of work which falls to the lot of all, shall we say "Pencil Pointers!"

And now, apart from our subject, but related to it, I want to append a word of warning of grave importance to architect and draftsman.

I shall take the liberty of repeating a prediction and warning by former Fire Commissioner, Robert Adamson, of New York, in which he speaks of possible great conflagrations in districts where one and two family frame houses are rapidly being erected or rather "slapped up," separated from each other by only a few feet. While Mr. Adamson's warning was made particularly regarding rapidly growing districts within New York City limits, this warning should be heeded by all cities and towns throughout the United States.

I need not dwell upon the unsanitary conditions arising from permanent or temporary "community" cess pools, etc., which are often installed in districts

and draftsmen who make the picture, as a rule, has no opportunity to superintend the workmanship or to know that the right construction and materials are actually used. How can the architect know, who does not superintend his own work, that proper flue linings are installed and heating ducts adequately protected where carried in frame partitions or that the chimney and the framing around it are so constructed as to eliminate the chimney as a cause of fire? How many speculative builders provide tight stops fitted in between the studs and floor joists to dam the flue-like openings and thus confine a fire to one section? There are innumerable other hazards which the well trained superintendent would guard against and which are entirely neglected in the "slapped-up" class of house referred to by the former Commissioner Adamson. The architect or draftsman who prepares drawings for unscrupulous builders, speculators or real estate development companies, simply to "make a little money on the side" and permit their interest in the finished build-

DESIGN IN THE DRAFTING ROOM



Figure 9

ing to cease with the delivery of the drawings, is equally guilty with them should human lives be lost as a result of careless and dishonest construction. I have seen so much of this "Jerry-built" work carried

on that I would like to feel that the members of the profession were awake to the graveness of the situation and would make it a part of their business as far as they are able to prevent such operations.



Figure 10

PENCIL POINTS

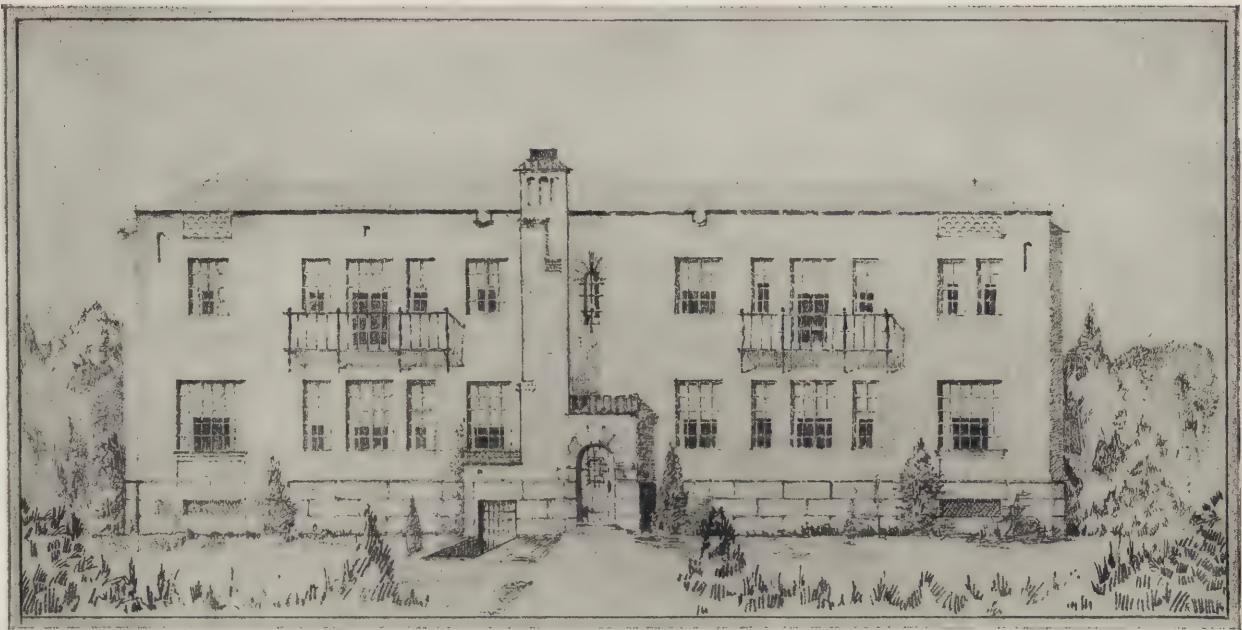


Figure 11

In closing this word of warning, need it be said that buildings (not even to be called homes) of this nature ruin forever many pleasant and delightful neighborhoods?

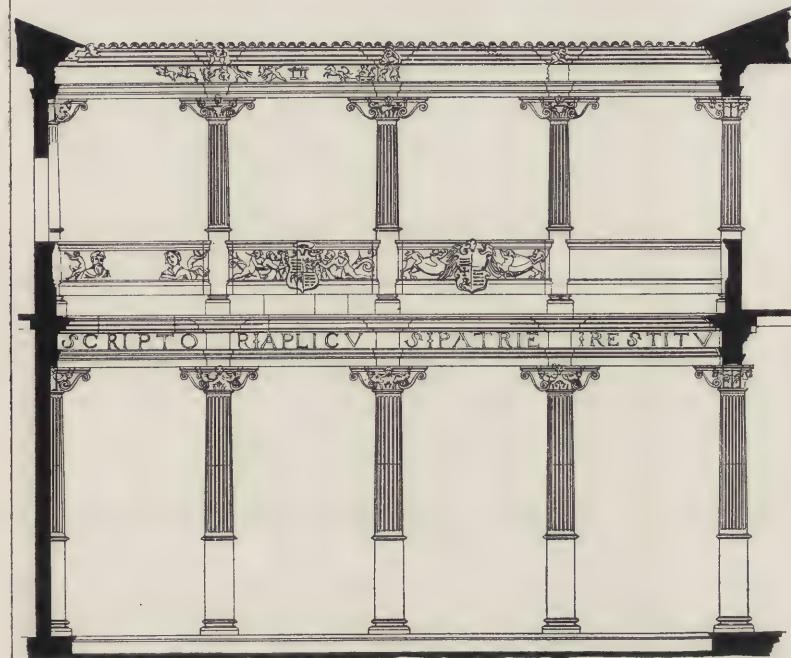
What has been said about the danger of erecting poorly constructed frame houses in congested districts should not be construed as an argument against the design and erection of houses and other buildings

of wood, in part or all, when built in the open residential sections of a community. Wood has been blamed for many of the faulty construction practices—short-cut practices in construction which regardless of the material used could never produce anything but failure. The environment, the character of the building and the architectural style desired dictate what materials to use and the principles of sound construction how to use them.



Figure 12

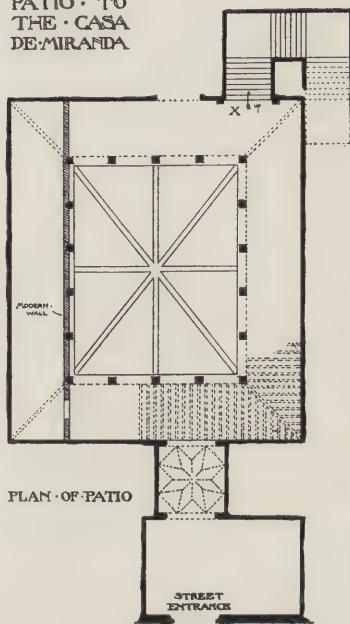
SCALE OF 0 10 20 30 FEET



ELEVATION OF PATIO

BURGOS

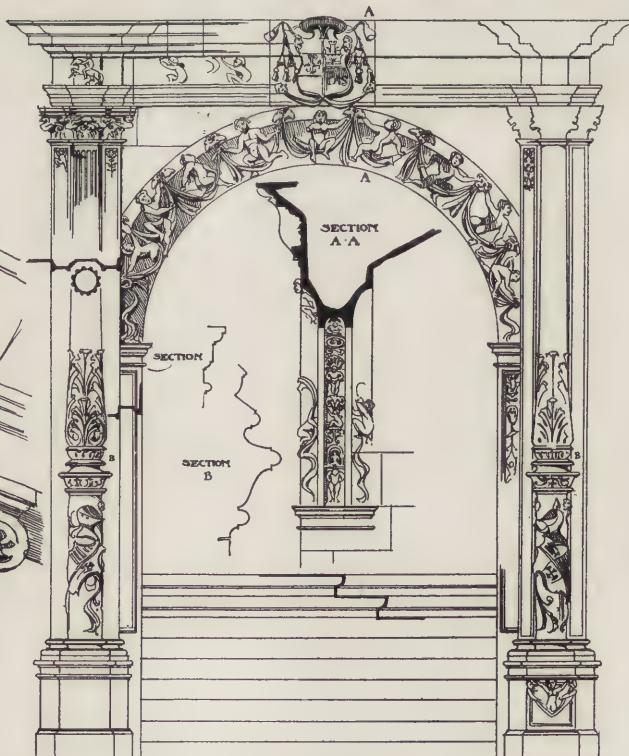
ELEVATION
PLAN AND
DETAILS OF
PATIO TO
THE CASA
DE MIRANDA



PLAN OF PATIO



SKETCH OF BRACKET CAPITAL
GROUND ARCADE



PORTAL TO STAIRCASE
SEE PLAN AT X

RENAISSANCE ARCHITECTURE AND ORNAMENT IN SPAIN
A PLATE FROM THE WORK BY ANDREW N. PRENTICE

PENCIL POINTS

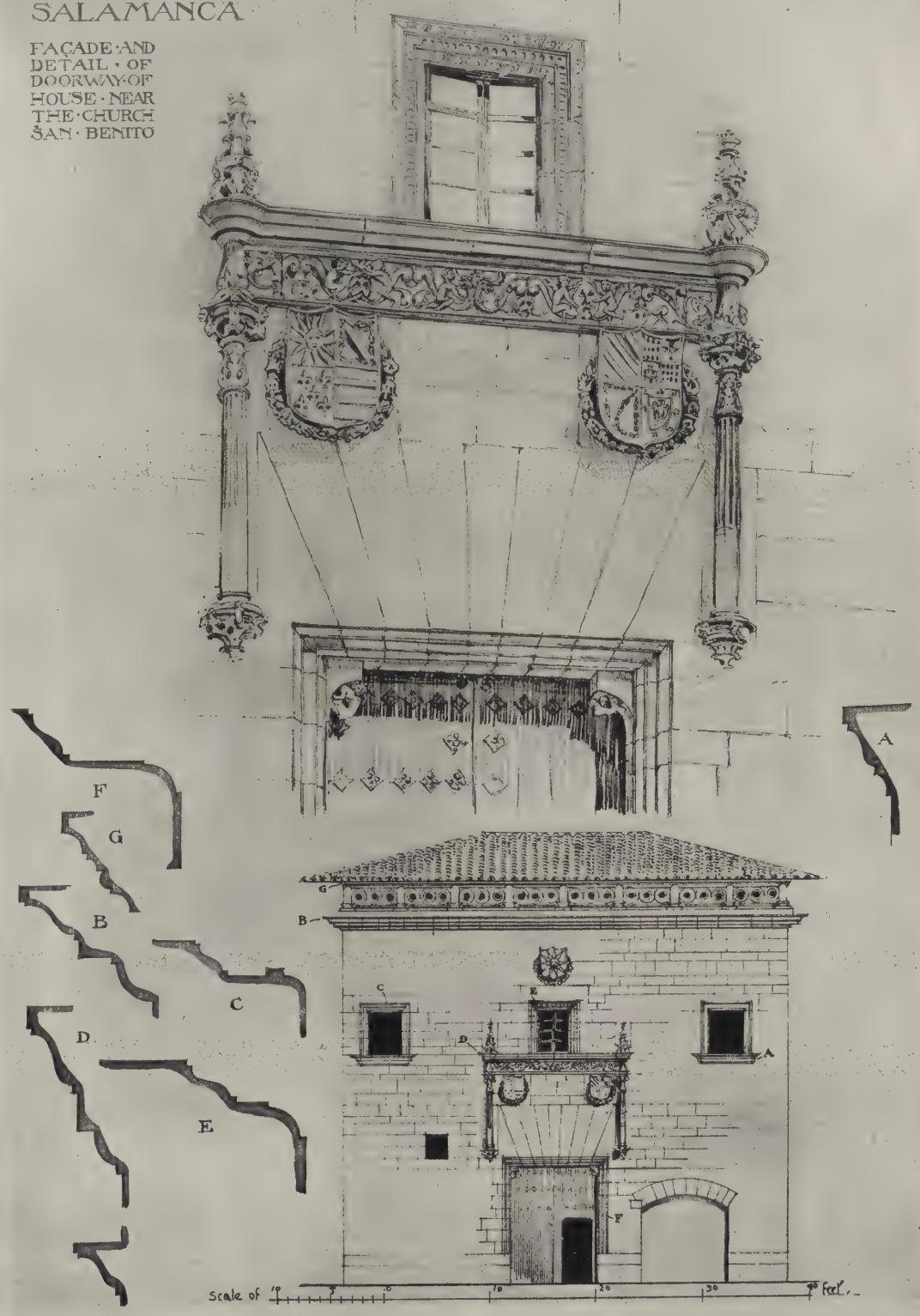
PLATE XLV

"A typical example of a Spanish nobleman's town residence which was built by the famous Condes de Miranda, and is now in a half ruined condition. The fine stone patio contains some of the best bracket capitals in Spain. The doorway from the Calle de la Calera has two columns on either side and is surmounted by a beautiful sculptured panel ornamented with female figures, and shields. Over the staircase is a richly panelled stone vault."

VOLUME VI, NUMBER 12

SALAMANCA

FAÇADE · AND
DETAL · OF
DOORWAY · OF
HOUSE · NEAR
THE · CHURCH
SAN · BENITO



RENAISSANCE ARCHITECTURE AND ORNAMENT IN SPAIN
A PLATE FROM THE WORK BY ANDREW N. PRENTICE

PENCIL POINTS

PLATE XLVI

This plate shows the street front of one of the quaint houses to be met with in Salamanca. "It is remarkable for the deep radiating voussoirs and the pleasing design of its doorway. The projecting roof is kept low, although it was evidently intended to be supported on arches springing from columns to form an open loggia at the top of the house. The idea seems to have been abandoned, as only the lower part of the pillars have been built."

VOLUME VI, NUMBER 12



PEN AND INK DRAWING BY JOHN RICHARD ROWE
OLD HOUSE AT COMPIÈGNE

PENCIL POINTS

PLATE XLVII

Reproductions of drawings by John Richard Rowe have been published in the plate pages of this magazine from time to time, but they have always been lithographs or drawings in lithographic pencil. Now we are able to show an example of Mr. Rowe's work in a different medium, pen-and-ink. The drawing reproduced on the other side of this sheet is a strong, direct piece of pen drawing as well as an interesting presentation of a well chosen architectural subject.

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PENCIL POINTS



LITHOGRAPHIC CRAYON DRAWING BY SAMUEL V. CHAMBERLAIN
RUE MOUFFTARD, PARIS

PLATE XLVIII

On the other side of this sheet we have reproduced a drawing in lithographic pencil by Samuel V. Chamberlain. The subject is a rather secluded market district on the Rive Gauche in Paris. Mr. Chamberlain has printed his drawing on a spongy Chinese stock which gives added softness and charm to his treatment of the subject.

VOLUME VI, NUMBER 12

A SELECTION OF DRAWINGS OF WORKS BY THE LATE DONN BARBER

THE memorial exhibition of the works of Donn Barber held recently in the galleries of The Architectural League of New York has suggested the desirability of presenting something in the nature of a memorial exhibition of the works of this architect in these pages, where they may be seen by a wider audience. In accordance with the practice of this magazine of publishing drawings in preference to photographs, a number of renderings and sketches representing some of the many notable works of Donn Barber have been selected for reproduction here. These buildings are already known to most architects, and draftsmen through the illustrations that have appeared in the architectural magazines that record current architecture, but it is felt that to group them together here will be interesting. In addition to the interest that attaches to the buildings as works of architecture the renderings and sketches have an interest all their own, as examples of draftsmanship.

It is natural to refer first to the design for the Broadway Temple, for it is at once the most unusual of all of his buildings

and the crowning work of Donn Barber's professional career. On page 78 is shown a rendering by Hugh Ferriss of the design for this building, while on page 79 are shown two other drawings, one a study of the mass and silhouette of the building and the other a tentative study for the main portal.

The design for the Broadway Temple is an epoch-making one. It undoubtedly marks the beginning of the practice of building accommodations for religious purposes into structures that have a large part of the space devoted to uses which make the church self-supporting, and perhaps even profit-producing. Figures prepared by a real estate expert show that this building will yield a profit through the rentals received from apartments, hotel rooms and stores in

the building, and it is intended to devote the profit earned in this way to the advancement of religious causes and to philanthropy.

The elements of the problem in the case of the Broadway Temple were to provide space for a church with Sunday school rooms, etc., a hotel, and apartments. The architects' solution places the

church auditorium and its related rooms in the lower part of a great central tower, the upper part of which is occupied by a complete modern hotel.

In the stories between the auditorium and the bottom of the hotel is the gymnasium with its swimming pool, placed where it is convenient for use in connection with both the church and the hotel.

Flanking the central tower are two complete and independent apartment houses. These parts have been combined skillfully in a highly effective composition.

One of the conditions which complicated the architect's task was the irregular shape of the plot of ground on which the Broadway Temple is to be built. But this has been made to contribute to the interest of the composition through introducing an element of variety,

one of the minor towers engaged upon the corners of the great tower having been made larger than the others to make the plan of the tower portion approximate the shape of the plot of ground.

The religious feeling necessary in such a design is obtained by the use of the central spire and by the treatment of the great main portal which gives access to the church. The whole will be topped by a large cross which at night will blaze with electric lights making it visible from a distance. The Broadway Temple will stand on what is probably the highest spot in New York City and will be a landmark for miles around.

The other drawings selected for reproduction here suggest the variety that exists in Donn Barber's



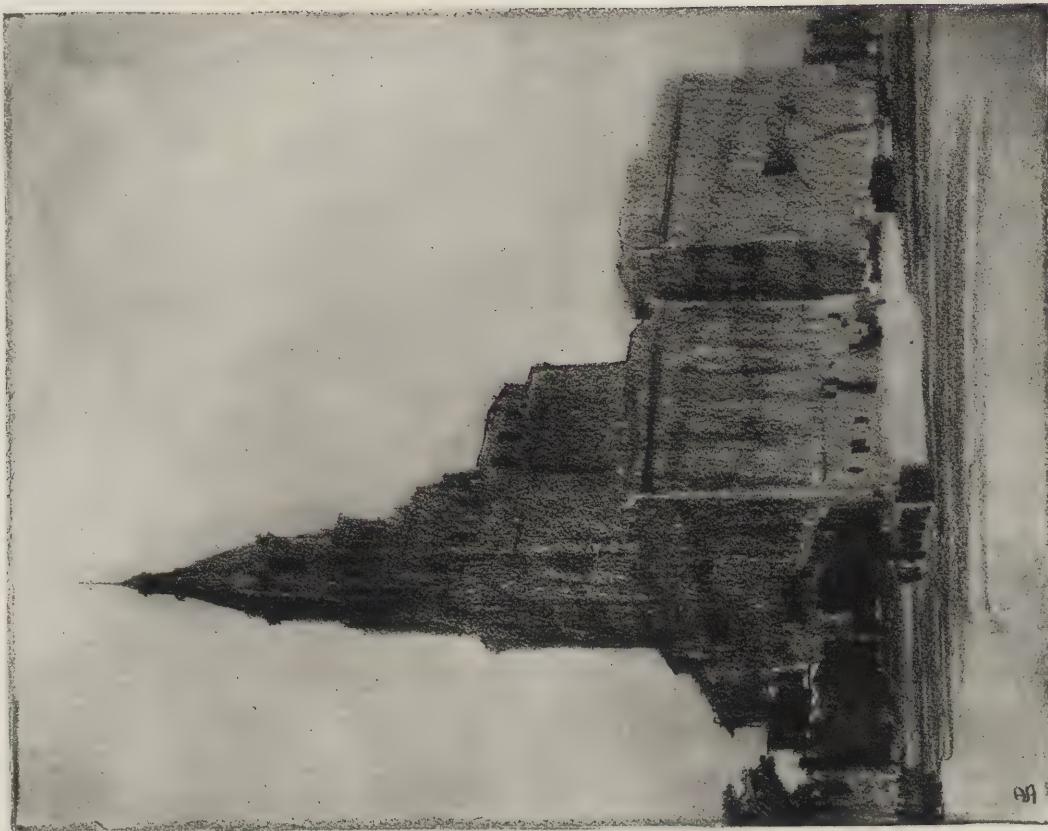
THE BERZELIUS SOCIETY BUILDING AT
YALE UNIVERSITY

Donn Barber, Architect.

PENCIL POINTS

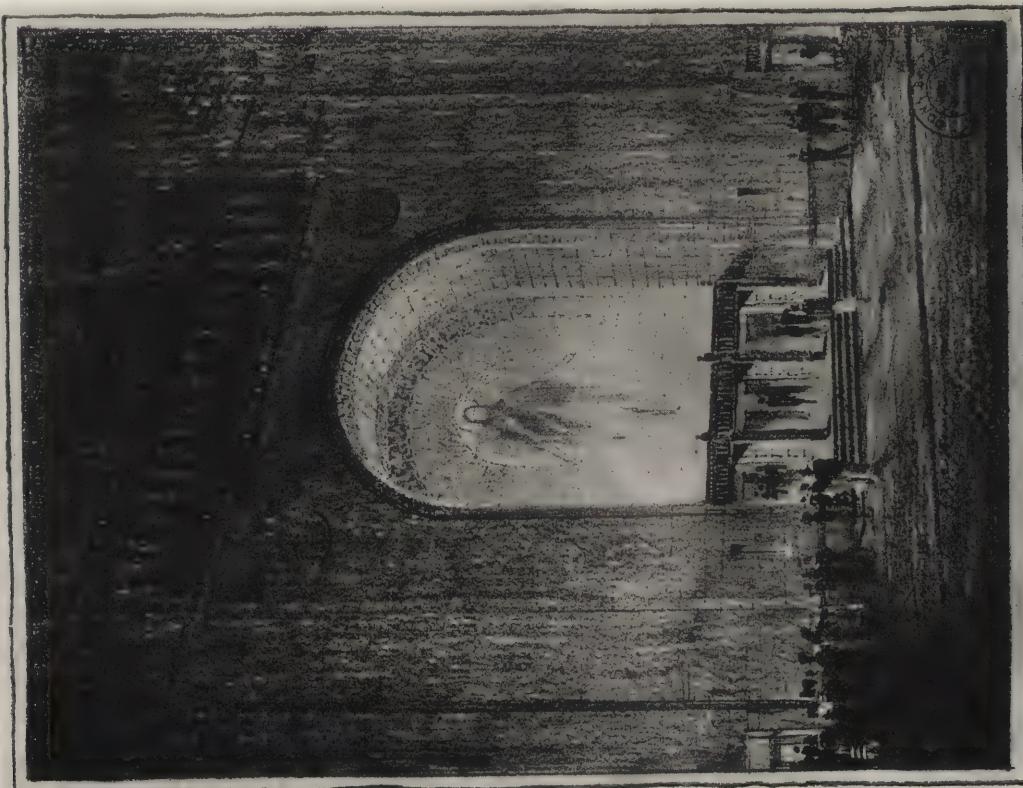


Rendering by Hugh Ferriss
PROPOSED BROADWAY TEMPLE, NEW YORK CITY
Donn Barber, Architect.



STUDY OF SILHOUETTE OF THE BROADWAY TEMPLE

Dom Barber, Architect.



STUDY FOR MAIN PORTAL OF THE BROADWAY TEMPLE

Dom Barber, Architect.

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THE LOTOS CLUB, NEW YORK CITY
Donn Barber, Architect.

A SELECTION OF DRAWINGS OF WORKS BY DONN BARBER



NATIONAL HEADQUARTERS
YOUNG WOMEN'S CHRISTIAN ASSOCIATION

NATIONAL HEADQUARTERS, YOUNG WOMEN'S CHRISTIAN ASSOCIATION, NEW YORK
Donn Barber, Architect.

PENCIL POINTS



NEW YORK COTTON EXCHANGE

6

THE NEW YORK COTTON EXCHANGE
Donn Barber, Architect.

A SELECTION OF DRAWINGS OF WORKS BY DONN BARBER



Drawing by Schell Lewis.

DESIGN FOR A THEATRE BY DONN BARBER

works—in the uses of the buildings and in the styles of treatment. The Berzelius Society Building at Yale, the Lotos Club, on Fifty-seventh Street, the National Headquarters for the Young Women's Christian

Association, the New York Cotton Exchange and the design for a theatre all bear the evidence of earnest and able architectural study and masterly treatment of each different problem.

STUDENT PROBLEM
BY
DONN BARBER



PENCIL POINTS

REG. U. S. PAT. OFF.

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DECEMBER, 1925

THE AMERICAN ACADEMY IN ROME

THE American Academy in Rome has announced its annual competitions for Fellowships in architecture, painting, sculpture, landscape architecture, musical composition and classical studies. In the fine arts the competitions are open to unmarried men, not over thirty years of age, who are citizens of the United States; in classical studies, to unmarried citizens, men or women.

In painting and sculpture there is to be no formal competition involving the execution of work on prescribed subjects, as formerly, but these Fellowships will be awarded by direct selection after a thorough investigation of the artistic ability and personal qualifications of the candidates. Applicants are required to submit examples of their work and such other evidence as will assist the jury in making the awards.

For the Fellowship in sculpture, the stipend is provided by the Rinehart Fund of the Peabody Institute of Baltimore, Md. The Fellowship in musical composition will be the Horatio Parker Fellowship.

For each Fellowship in the fine arts, the stipend is \$1,250 a year for three years, with some additional allowances for material and model hire; in classical studies, there is a Fellowship for one year with a stipend of \$1,250, and a Fellowship paying \$1,250 a year for two years. All Fellows have opportunity for extensive travel, and Fellows in musical composition, who travel about six months of the year in visiting the leading musical centres of Europe, receive an additional allowance of \$750 a year for traveling expenses. In the case of all Fellowships, residence and studio (or study) are provided free of charge at the Academy.

Entries will be received until March first. For circulars of information and application blanks, address Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York City.

The American Academy has also announced that the fourth Summer Session for teachers and graduate students in the classics, history and related subjects will be held in Rome from July 5 to August 13. The Director will be Professor Grant Showerman of the University of Wisconsin, who was Director of the Summer Sessions of 1923, 1924 and 1925.

The work will consist of one comprehensive and unified course designed to communicate a general acquaintance with the city of Rome in all its phases from the first settlement to the present time, and a special acquaintance with it in the time of Cicero, Caesar, Virgil and the first Emperors. For further details write to Professor Grant Showerman, 410 North Butler Street, Madison, Wisconsin.

THE NEW YORK ARCHITECTURAL CLUB, INC.

IF the spirit of warm friendship displayed at the various social affairs of the club is to be considered an indication, The New York Architectural Club is certainly due to be one huge success.

For example, witness the effect of the dinner-dance given by the club at the Knickerbocker Grill on the 20th of October. Even at this writing, almost four weeks after the affair, whenever two or more draftsmen meet, the conversation is bound to include it, and many a good laugh is caused by the reminiscence of some incident or other that took place. This is very remarkable, when one considers the swift pace, and the multifarious activities crowded into the life of the average New Yorker. It all goes to prove that the club is being laid on a sound foundation, and that is summed up in good fellowship, congenial and sympathetic companionship and the understanding due to kindred interests. It has been decided to have an affair of this kind each month.

The infant club has now attained the ripe old age of about eight months, and the membership roster reaches close to six hundred in number. The Board of Directors is considering various propositions for a club house, and without a doubt some definite action will be taken in this direction in the very near future.

At this time it may be considered apropos to mention briefly the history, the aims and the ambitions of the club.

It is a very peculiar situation that smaller cities and towns all over the country have had architectural clubs for a long time. Yet New York, the center of the architectural profession of the entire Western Hemisphere, where many of America's best architects are located, and where so much great work is conceived and executed, never had an architectural club worthy of the name, spirit and purpose. Various feeble attempts have been made in the past to organize and found clubs, but these were either poorly launched or were not properly organized. The nearest thing to a club has been the Architectural Bowling League of New York, which is now 19 years old, and going stronger than ever.

Now, the same men who have always been the moving spirits in the Bowling League, have organized the club, and all indications show that their work is well grounded. The Bowling League and its resources is in back of the club, and will always remain an active part of the organization. This also applies to the Architectural Tennis Tournament organization and the Architectural All-Star Base-Ball Club, both recently formed.

The Architectural Club of N. Y., Inc., is now an accomplished fact, gaining momentum every day. The primary aims of the club are to bring the men in this profession more closely together through social and fraternal activities and the rendering of all possible aid in securing positions for men out of employment. Thereby giving us an opportunity to obtain a better understanding of one another and our problems, and in this way add to the cheerfulness of life as much as possible. While the employers will have absolutely no say or control in or over the club, the club has, and will always retain the most cordial relations with the employers, especially since there is not the slightest reason to do otherwise. In recognition of this fact, some of the best known leading architects in this city have expressed their unsolicited approval of the club, and have offered financial backing, if the draftsmen desire it.

The ambitions of the club are to obtain a good sized club house centrally located, which will bring in revenue other than dues. The club portion of the building to have comfortable lounge rooms, auditorium, meeting rooms, library, ateliers, bowling alleys, gymnasium and dormitory.

All this can be easily had, if the men pull together, and judging by the enthusiasm shown by the first 600 members, we most assuredly will have them in the not distant future.

PENCIL POINTS

So far the members have been taken in as charter members, thereby paying no initiation fee, and will continue so for only a short time hereafter. Perhaps only until the membership reaches the 1,000 mark. Thereafter it is proposed to place an initiation fee of \$25 or \$50 on each application for membership, which is no more than fair, considering that the founders have done all the organization and stabilization work. The dues are \$10.00 a year and considering the type of organization, this amount is very small indeed. The membership is in three classes. Class "A" consisting of men employed by practicing architects. Class "B" consisting of men in the allied arts, such as engineers, employees in builders' offices and others connected with the various trades, etc. Class "C" will be honorary members. The class "A" men only will have the controlling vote in the regular meetings, and the class "B" men will vote only in the election for officers at the general meetings.

There are several thousand architectural draftsmen in New York and vicinity, and as all indications show that without a doubt the majority will belong to the club, it therefore stands to reason that when vacancies occur in the various offices, the club men will be first to know of them, and will be in preference. It therefore follows that the time is not far off when a draftsman must ask himself, not can he afford to belong to the club, but **can he afford to be out of it.** This is merely the forecast of a condition which any man with a little common sense can foresee, and which will automatically follow as a matter of course, just as sure as sunrise and sunset.

The writer will gladly give further information, and assist applicants that qualify in the above mentioned classes to join, if they will call on him, or send their address.

Architectural Bowling League Section

The Bowling League is nearing the end of the first round for 5 man teams, and at this writing the standing of the teams is as follows:

No.	Office	Won	Lost
1	Cass Gilbert	11	1
2	Warren & Wetmore	14	2
3	Alfred C. Bossom	9	2
4	Guilbert & Betelle	9	3
5	Don Barber	12	4
6	McKim, Mead & White	12	4
7	McKenzie, Voorhees & Gmelin	12	4
8	James Gamble Rogers	6	5
9	Andrew J. Thomas	7	7
10	Starrett & Van Vleck	5	5
11	Thomas W. Lamb	7	8
12	Peabody, Wilson & Brown	7	9
13	J. E. R. Carpenter	6	8
14	Holmes & Winslow	5	10
15	Schwartz & Gross	4	8
16	Allen & de Young	3	8
17	Benjamin W. Morris	2	7
18	Shape, Bready & Peterkin	2	12
19	W. L. Stoddart	0	15
20	Schultz & Weaver	0	13

The New York Architectural Club, Inc.,
The Architectural Bowling League of N. Y.,
The Architectural Tennis Tournament, and
The Architectural All-Star Base-Ball Club,
individually and collectively are grateful for this opportunity to heartily wish all their friends a happy and gay Christmas season, and a very prosperous New Year.

HENRY SASCH, Secretary,
Care of Donn Barber,
101 Park Avenue,
New York City.

A CORRECTION

THE rendering of "The Most Holy Place," on the November cover of PENCIL POINTS was made by Mr. Birch Burdette Long.

Mr. Arthur Neal Robinson, 623 Candler Building, Atlanta, Ga. is very desirous of securing copies of PENCIL POINTS for the following issues:

1920—July, August, September, October and December
1921—January, March and April

DETROIT ARCHITECTURAL BOWLING LEAGUE

THE Detroit Architectural Bowling League is off to a good start on its fourth season. There were a few changes in the teams this year but the friendly spirit of competition and good fellowship, which has always prevailed, is as strong as ever.

We intend to break all existing records this year, and, incidentally give New York or any other league team, which claims to understand bowling, an exhibition of "knockin' 'em dead." Bring on your seconds!

The standings of the teams on Oct. 30th were as follows:

	W.	L.	Pct.
Janke, Venman & Krecke	17	7	.708
Malcolmson & Higginbotham	15	9	.625
Geo. D. Mason & Co.	14	10	.583
Smith, Hinchman & Grylls	14	10	.583
Donaldson & Meier	13	11	.542
McGrath, Dohmen & Page	13	11	.542
Albert Kahn, Inc.	12	12	.500
Weston & Ellington	11	13	.458
Van Leyen, Schilling & Keough	6	18	.250
Simmers & Waalker	5	19	.208
2nd High Score			
1 game—Carmiencke (V.L. S. & K)			256
2nd High Score			
3 games—R. Fraser (D. & M.)			637
Team High Score			
1 game—McGrath, Dohmen & Page			995
Team High Score			
3 games—McGrath Dohmen & Page			2796

BOSTON ARCHITECTURAL CLUB

FOLLOWING the usual summer hiatus, during which time important additions and improvements were made to the Club House, the winter activities have started with a "bang." The student enrollment for our night classes is about 150, the preliminary design having over forty and a waiting list besides. Our usual atelier system is followed with Professors Haffner of Harvard and Carlu of "Tech" in supreme command. The more advanced problems are conjunctive with those of Harvard and "Tech" day schools, with judgments at the same time and by the same Jury, independent and yet competitive.

The Educational Committee of the Club in general supervision of all work and policies is J. N. Holden, Chairman, E. Leslie Morgan, James Ford Clapp, Robert P. Bellows, Maurice Feather, Bruce Ellwell and Henry R. Shepley.

The Instructor in charge of Preliminary Design is Mr. John F. Alter; Two Week Sketch Class, Mr. Holden; Analytique, Mr. Morgan, Classes "B" Plan and "A" Messrs. Haffner and Carlu.

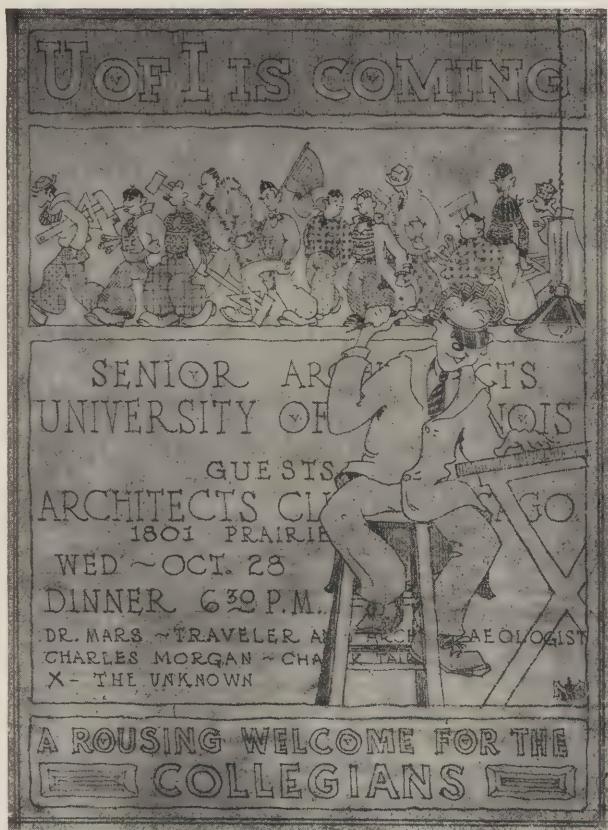
The atelier system has more nearly the atmosphere of the Paris ateliers than any found in this country and the success of the students in the "Rotch" and other important competitions places our "after hours" system of instruction, where the day workers can educate themselves while working, pretty nearly the top of any work carried on in or for the profession of architecture.

A competent Committee will look after and provide recreation in the form of dances, frolics etc., during the winter.

The life class has just started most auspiciously under the leadership of Mr. A. L. Kelley; The Water Color Class under Mr. Carroll Bill will start next week and the important construction classes under Mr. Charles Shedd and Mr. Temple. The History of Architecture lectures by Mr. Louis C. Newhall complete a thoroughly comprehensive curriculum. When one realizes that twelve of the last nineteen winners of the "Rotch" came via the gate-way of our endeavor and that winners of scholarships are now at Harvard and Princeton Universities out of our Atelier, the magnitude of the results accruing from the individual devotion of the gentlemen who give their best to the up-raising of the profession is convincing.

Truly the Profession must be proud of and wish God-speed to The Boston Architectural Club and its faithful few.

PENCIL POINTS



INVITATION ISSUED BY THE ARCHITECTURAL SKETCH CLUB OF CHICAGO

THE ARCHITECTURAL SKETCH CLUB OF CHICAGO

THE following men submitted solutions for the first problem of the Beaux Arts Institute of Design.

Class "B" Analytiques

Edgar Nelson	Fenton Russell
	D. Rothe

Class "B" Projets

P. Schweiker	E. Tourtellote
T. O. Menees	Ed. Weiss
W. Nevarra	G. Eisenbarger
	E. Wallden

The boys are up and at them again after their first charette and all are now busily engaged on the current problem. The subject of the current problem in the Class B Analytiques is "A Tomb like that of Napoleon." 23 esquisses have been turned in on this problem. For the Class B Projets 8 esquisses have been submitted. The problem this time is the design of "A Tennis Court Bldg." "A Pedestal for An Equestrian Statue" was the subject of the Class "A" Esquisses. For which 3 solutions were turned in.

After a summer of varied activities the Architectural Sketch Club of Chicago turned out en masse for the first problems of the year. The great problem was the holding of the annual Golf Tournament which afforded the draftsmen and architects a great medium for their various and individual solution.

There were some twenty contestants entered and a good solution was turned in by each.

The Tournament was staged on October 3rd, at the Dixmoor Country Club.

The Committee in charge was very energetic and due to their combined efforts a precedent was established in the offer of first prize which consisted of a silver loving cup. The conditions governing the award were that the winner's name would be inscribed upon the cup together with the year in which said winner won it as club champion. There were prizes offered for a club member's blind bogey scores, and the blind bogey prize for visitors

for a low net score was open to either. The members were requested to invite any of their friends as visitors or guests. Mr. Elmer J. Fox was the competitor who submitted the best solution for the problem and was awarded the first prize together with the title of Club Champion. Mr. Clarence Farrier, Mr. A. S. Morphett and Mr. George M. Nedved were awarded the members' prizes for low blind bogey scores. The blind bogey prize for visitors went to Mr. W. T. Walters and the low net score prize was awarded to Mr. E. Roe. The tournament proved to be a great success as it helped to foster some very interesting inter-office competition. We were also very fortunate in the fact that the weather man was in great humor and furnished us with very good golfing weather.

On October the 28th, the Architects Club of Chicago, an organization of which the Sketch Club is an integral part, had as their guests the members of the senior class of the University of Illinois. The day was spent in visiting the various architectural offices in the city and in the evening the guests repaired to the Club rooms for dinner. After partaking of a very excellent dinner, the balance of the evening was devoted to a program arranged by the Architectural Sketch Club. Dr. G. C. Mars, gave a very interesting talk upon his impressions gleaned at first hand while traveling abroad. Dr. Mars was followed by Mr. Charles Morgan whose "Chalk Talk" on "Composition and Sketching" was very educational and interesting. Mr. Morgan illustrated the various points which he wished to emphasize and in this way his subject was very clearly brought home. In view of the fact that Mr. Morgan is one of the recognized men of the country in this type of work, his talk was received with great enthusiasm by the draftsmen and students who were present. The balance of the program was devoted to Mr. Andrew Rebori who is known for his untiring effort in behalf of the Ateliers in the Beaux Art Institute of Design. Mr. Rebori talked on his impressions of Architecture, some of which sparkled with rich humor. The program was well attended. Some 125 members and guests being present.

Under the auspices of the Educational Committee, of which Mr. T. O. Menees is chairman, a tour of inspection through the Decorator's Supply Company was held on November the 31st.

The members were conducted by Mr. Metzger personally through the plant where they acquired some very helpful information pertaining to the possibilities of plaster and composition work. Through the kindness of Mr. Metzger, the party was enabled to see some actual plaster casting take place which was very educational and interesting. Each member was presented with a very serviceable book on plaster and composition work.

The above mentioned committee is now at work upon plans for a similar tour of inspection through the ornamental iron works of A. E. Coleman, a definite date of which will be announced in the near future.

Friday, December the 18th, will be devoted to "The Arts Ball" which will be held at the Congress Hotel. All members of the Architectural Sketch Club should be present as a very interesting and entertaining evening will be guaranteed. More detailed information will be announced shortly by our Entertainment Committee who are now working upon the final plans for the affair.

At the Board of Directors meeting held on November 2nd, the following applicants were accepted as members of the Sketch Club to whom we extend a royal welcome:

Hal Pereira	Jesse E. Shellenberger
Wm. F. Koenig	Edward Russ
Edgar H. Nelson	Wm. J. Doran
Fenton H. Russell	Elmer R. Hawley

PARTNERSHIP WANTED

An experienced architect and structural engineer with a good record of achievement in Pittsburgh, New York and the South, desires to connect with a New York architect either as partner or to supervise the production of buildings, including the writing of specifications and oversight of the drafting-room. Fully qualified in every way to deliver the goods. Salary commensurate with services rendered. Address A. W. S. care of Pencil Points.

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BROOKLYN CHAPTER OF A.I.A. ANNOUNCE COMPETITION

THE Brooklyn Chapter of the A.I.A. has announced a competition open only to Student Affiliates of the Chapter who are at the present time within the territory and jurisdiction of the Brooklyn Chapter. The competition is part of a general program of student recognition and education, planned by the Chapter for the Student Affiliation of the organization. The subject of the competition is "A Gasoline Filling Station." There will be three cash prizes, each accompanied by a certificate of award, and an undetermined number of Honorary Mention Certificates: First Prize, \$100; 2nd Prize, \$50; 3rd Prize, \$25. The program has been submitted to and approved by the Competition Committee of the American Institute of Architects. For copy of the complete program address Lester B. Pope, Pratt Institute, Brooklyn, N. Y.

ATELIER RECTAGON OF BUFFALO

THE Atelier Rectagon of Buffalo, one of the liveliest barring none, on November 6th introduced six of a list of nine to friend Nebuchadnezzar.

Roy McMurray wrote an elaborate ritual, humorous to the extreme, but in the solemn manner presented, became very impressive.

H. A. Weiland designed an elaborate "set" in keeping with the ritual. The candidates were led before the temples exemplifying the five Orders where they learned the chief characteristics of each one. Their journey ended before a Mohammedan praying tower wherein dwelt the high and all mighty Architect, at whose feet they bowed and petitioned for the knowledge and ability to attain this most high place one day for themselves.

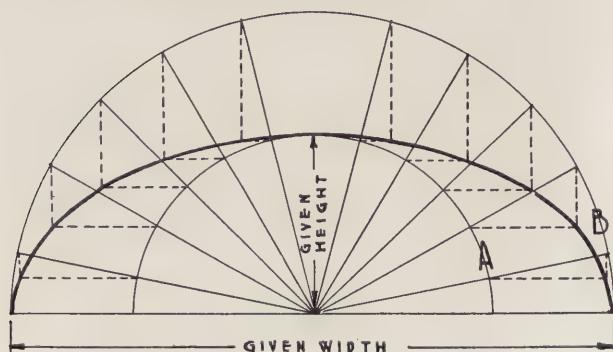
It was the first attempt the Atelier has made in this work but its success was very gratifying and well worth the effort to carry it through.

The Atelier through its committee on education, headed by H. A. Weiland, is conducting a series of lectures each Friday evening. These lectures in general are on topics pertinent to the every day practice in the drafting room. The lecturers are men engaged in contracting, manufacture of building materials or engineers of the various branches of the work of the profession. The older men are gaining as much benefit from the undertaking as the juniors.

ANOTHER WAY TO DRAW AN ELLIPSE

HOWARD C. LONEY of Washington, D. C., has sent us another method of drawing an ellipse which we reproduce below. He says that this is the style used by Architects in Washington, and is an easy way to get an arch for doorway or windows, by drawing freehand or by using the French curve.

ELIPTICAL ARCH



- GIVEN - WIDTH OF ARCH AND HEIGHT OF ARCH.
1.- DRAW SEMI-CIRCLE A-DIAM OF GIVEN HEIGHT.
2.- " " " B- " " " WIDTH.
3.- PROJECT DOTTED LINES AS INDICATED FROM
POINTS WHERE RADIATING LINES DRAWN
FROM CENTER INTERSECT CIRCLES A AND B.



G. M. PEEK

G. M. PEEK has recently returned from Egypt where he was sent in 1924 by the Metropolitan Museum as a member of their Egyptian Expedition. He spent seven months in Egypt making restoration drawings of Menthu-Hotep and Hat-Shep-Sut Temples across the Nile from Luxor and made drawings of a temple known as Hibis Temple at the Kharga Oasis in the Sahara desert. After leaving Egypt Mr. Peek spent six months travelling, studying and sketching the architecture of Greece, Turkey, Asia Minor, Italy, France, Switzerland, Spain and England.

He was born at Palatka, Florida in 1900. He received his B. S. degree at John B. Stetson University, DeLand, Florida, in 1920, and after obtaining his license to practice worked in numerous architectural offices in Florida. He attended Harvard University, School of Architecture, for three years, receiving his degree of Master of Architecture in 1924. During his course at Harvard he worked for two years in the office of Allen & Collens, Architects, of Boston. Mr. Peek is now employed as architect for the Home Construction Co., of Bradenton, Florida.

FOR THE ATTENTION OF SPECIFICATION WRITERS

THE Hydrex Asphalt Products Corporation, calls our attention to two items which have recently appeared in these pages wherein the term "Membrane Method" has been used by authors in connection with products other than those furnished by the company in question. The items appear on page 97 of the September issue and page 101 of the October issue. Both Mr. Beach and Mr. Gaertner used the term "Membrane Method" without knowing that these words are trademarked by the Hydrex Asphalt Products Corporation. We are assured it was not the intent of either writer to ignore the property rights of the company and that in their articles they used the words in their general sense as they have come to be quite generally used throughout the profession.

This notice is printed merely to inform the specification writers of the existence of the trademark and its ownership by the Hydrex Asphalt Products Corporation.

PENCIL POINTS

PERSONALS

WESLEY LESHER BLITHE, ARCHITECT, has removed his office to Suite 726, Public Ledger Bldg., Independence Square, Philadelphia, Pa.

HARRY MARSHAL, ARCHITECT, has moved his office from Providence and is now practicing at 205 Ferlita Bldg., Tampa, Florida.

FRANCIS E. DUNLOP, ARCHITECT, has removed his offices to 30 North La Salle Street, Chicago, Ill.

HARLEN E. SHIMMIN, ARCHITECT, has removed his offices to 404-5 Bulkley Bldg., Cleveland, Ohio.

RALPH C. FLEWELLING, ARCHITECT, has removed his offices to 423 Camden Drive, Beverly Hills, Calif.

NORMAN H. HILL, ARCHITECTURAL ENGINEER, has removed his offices to 1135 S. W. St., Rear, Miami, Florida.

EDGAR SHELTON has opened an office for the practice of architecture at Texas Technological College, Lubbock, Texas.

JOHN G. STASSE AND HARVEY P. BARNES are now associated for the practice of architecture with offices at 175 Fifth Avenue, New York.

ADDRESSES WANTED

ANYONE knowing the correct addresses of the following will confer a favor by sending them to this office, Pencil Points Press, Inc., 19 East 24th Street, New York City.

CALIFORNIA—M. F. Aiman, Everett R. Harman, Fred L. Hutchins, Samuel P. Lipschitz, Jack Moore, Henry F. Starbuck, D. P. Thomas, Alonzo Warden, Los Angeles; W. L. Harrison, Oakland; L. Chaffee, San Anselmo.

COLORADO—H. Z. Sanders, Boulder.

CONNECTICUT—Helen Goodwin, Hartford.

FLORIDA—E. J. O'Callaghan, Hialeah; J. D. DeBra, Arnett Elliott, R. O. Waterland, Miami; Marie Ballett, West Palm Beach.

ILLINOIS—Lee Atwood, Lloyd H. Dittrich, D. D. Ehresman, Cicero Hine, J. B. Lindquist, Ben H. O'Connor, T. Rissman, J. William Sievert, Stanley Snow, Emil Zumkeller, Chicago; Don S. King, Springfield.

INDIANA—Joseph P. Leach, Jr., Michigan City.

IOWA—C. H. Perisho, Bloomfield; Eugene F. Gier, Conrad; V. O. French, Des Moines.

KANSAS—J. E. Brink, Manhattan.

KENTUCKY—Angelo Rich, Harrison.

MASSACHUSETTS—A. D. Badour, Cambridge; Eleanor Ferguson, Lawrence; Harry B. Greene, Worcester.

MICHIGAN—W. G. Chan, John H. Barry, Wayne H. LaVerty, Paul Peters Opperman, Margaret Ward, L. M. Wetzel, W. B. Wiener, Ann Arbor; Edgar H. Brown, Verne H. Sidman, Detroit.

MINNESOTA—Alvin J. Jansma, S. C. Wong, Minneapolis.

MISSOURI—M. G. Mackey, Kansas City.

NEBRASKA—A. W. Atkins, Lincoln.

NEW JERSEY—John J. Baldino, Passaic; John Clarke Boles, Jr., Princeton.

NEW YORK—Phillip W. South, Maspeth, L. I.; Thomas Adkins, Walter H. Babcock, E. Babitsky, Martin Beck, James P. Hugel, Kieswitter & Hamberger, M. McDowell, Howard Meyer, Gunnar Schjeldrup, Edgar D. Tyler, New York City; P. E. O'Brien, Waterloo.

OHIO—Harry McMorris, Cleveland; Tom Rayburn, Columbus.

PENNSYLVANIA—Arthur Rosenfeld, Penn State; Herman H. Kline, Austin R. Minich, Robert Strelitz, Malcolm F. Wandling, Philadelphia; E. M. Stitt, State College; Doyle S. Eberhart, Uniontown; Edmund Poggi, Wilkes Barre.

SOUTH CAROLINA—R. G. Allen, B. M. Spencer, Clemson College.

TENNESSEE—W. W. Donaldson, Knoxville.

TEXAS—A. E. Boyer, Harrisburg; Sol R. Slaughter, Houston.

UTAH—Slack W. Winburn, Salt Lake City.

VIRGINIA—L. D. Bean, B. Franklin Hart, 3rd, Marshall Wells, University.

WEST VIRGINIA—Paul C. Kintzing, Huntington.

MASTER DRAFTSMEN, XVI—THOMAS HASTINGS

(Continued from page 60)

ican Institute of Architects, is Chairman of the Sardis Exploration Society Commission, President, Beaux Arts Institute of Design, one of the Founders of the Federal Art Commission, Chairman, Lincoln Highway Commission, Director in the Museum of French Art and was at one time President of the Architectural League of New York, one of the Founders, and several times a Director.

The practice of Carrere & Hastings has never been confined to one type of building but has been broadly inclusive. Among the best known of their important works are; the New York Public Library, Century Theatre, Manhattan Bridge, Staten Island Terminal, Ponce de Leon Hotel, and the Standard Oil Building. Hastings' great triumphal arch built (temporarily) in honor of the home coming troops was one of his most effective designs.

Hastings has always taken a keen interest in the development of the younger men in the profession, and in educational work. His geniality is as well-known as the importance of his architectural work.

EUGENE CLUTE

MONKS AND JOHNSON ANNUAL OUTING

A MOST interesting and unusual outing was enjoyed by the employees and members of the firm of Monks & Johnson, Architects and Engineers, Boston, during the last month. A committee organized the members taking care of transportation, food, recreation, etc., which would do credit to the A. E. F. Starting out in a grand parade from Boston the autos of frolickers wound its way down the beautiful south shore boulevards arriving at their rendezvous, a summer house at Brant Rock, just before noon. A few games were played before the noon lunch when much apple cider and other "goodies" were imbibed only to be quickly forgotten in favor of the exciting contests between single and married men, architects and engineers, old folks and young, no! old were young this day. There were relay and sack races, nail driving contests for girls, tug of war and races between married and bachelor boys and a "free for all" eating contest, the latter unofficial. The tennis games and bowling caused much anxiety and some laughter. The Casino which was reserved for the Clam Bake proved inadequate perhaps due to the unusual amount of broiled lobster consumed with its accessory trimmings and other things but after some more bowling and a few moonlight waltzes by the firm's own orchestra the crowd of merrymakers regained normalcy again only to become more lively with the advent of an even larger jazz orchestra. A huge bon fire on the beach made a very fitting picture as the crowd sang old fashioned songs to the tune of strumming banjos and toasted marshmallows until the cool blue hours of night beaconed them home again. Everyone had such a rollicking good time that engineers forgot their slide rules and bosses their intense reserve, even the moon forgot to retire.

JOHN S. BARNEY

JOHN STEWART BARNEY, architect and landscape painter, died November 22nd, at his home, 863 Lexington Avenue, New York, following an operation three weeks ago. He had been ill five weeks.

Mr. Barney was fifty-seven years old. He was born in Richmond, Va., the son of Charles G. Barney, of New York. He was graduated from Columbia in 1890, and then studied architecture in Paris. When he returned to New York some twenty years ago, he designed many well known buildings, among them the Broadway Tabernacle, the Church of the Holy Trinity, in East Eighty-eighth Street; the Hotel Navarre, and the Hart Memorial Library in Troy. In 1915 he turned his attention to painting, using for the most part scenes about Newport and Bar Harbor. He exhibited annually at the Kingore and Ehrich galleries.

A NEW YEAR'S SUGGESTION

NOW is a good time for every draftsman to open a savings bank account and put some money away every week. Business throughout the country is good and so far as we can see is going to be for quite a while; but the good old pendulum has a way of swinging back and the laws governing such things have not been repealed. A tidy little wad laid away in a safe place is a pleasant thing to contemplate.

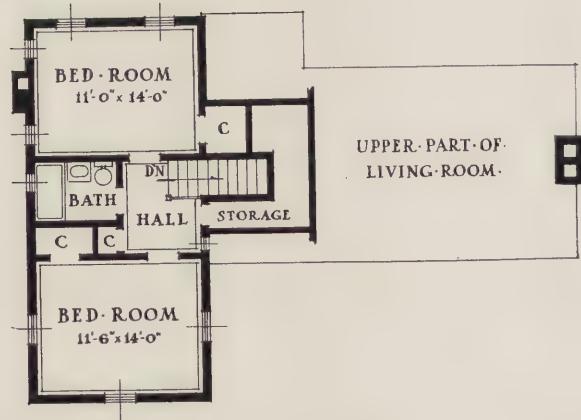
PENCIL POINTS



Perspective



First Floor Plan



Second Floor Plan

DESIGN FOR SMALL HOUSE INSPIRED BY FRENCH PRECEDENT

FOSTER AND VASSAR, Architects



FIELD SKETCHES IN PENCIL

By Students of the Columbia School of Architecture

Sketches and Explanations by Torrance Fiske and J. Crawford Byers

THE sketches which are reproduced may be of interest to readers of PENCIL POINTS as the product of a certain school training and an interest in sketching.

As students of architecture, we are all vitally interested in sketching. It is a language we must acquire. I think I feel about it just as the immigrant feels about a chance to learn to write English.

When I came to Columbia School of Architecture two years and a half ago, I knew nothing of sketching. Evidently the gentlemen who planned the work were expecting such as me, for they lost no time placing a pencil in my hand, and putting me hard at it on one pretext or another. Even the lecture courses, it developed, required drawings, and soon, for the fun of it, many of us were trying to sketch the pictures flashed on the screen for a few seconds during history lectures. If this diversion accomplished nothing else, it did at least disclose to us the first consideration in the art of sketching.

I mean the necessity to distinguish and select the essential elements of the subject, throwing away all the rest. This is hard to do. It seems to me it is one of the very hardest things of all to develop,—this seeming extravagance. But so important is this ability to separate the essential from the non-essential in all fields of intellectual endeavor, and so well does sketching develop this attitude of mind, that it might well be included as a subject of study in any liberal program of education.

An architect told me of travelling through Europe with a young graduate of an architectural school, who insisted on carrying with him a

portfolio full of renderings by famous artists. To these he referred from moment to moment throughout the process of his own sketching. That man was fundamentally wrong. He did not comprehend that the life of the sketch must come from the personal conception of the subject, and that technique alone is like the dead body of a man.

After this mental process must follow the technical skill to express what you see in the way you see it.

But there is much that we should learn about technique from others' work. It is necessary to acquire a vocabulary for this kind of expression, and one legitimate means is the careful study of good drawings. From Hugh Ferriss' work might well spring the question "Why draw in line,—a mere convention? Why not in planes, as things exist?" From a study of Chester Price will come a greater appreciation of values, and of strokes well made,—so sure and always so clean; and from Otto Eggers a sense of texture, a feeling of stone on stone, and a conception of the possibilities of light effects. There is much that such men can teach us.

I wonder if I could speak of artistic feeling and imagination? But such forces, like most of the best things in the world, defy analysis. Perhaps it is sufficient to recognize the part they play in art.

To sketch with facility is to write the language of architecture. It is an accomplishment essential to the finished architect. It may be that good sketches are produced only by those born with extraordinary talents, but I think that they are within reach of any one who is reasonably

PENCIL POINTS

susceptible to beauty, and who possesses an intelligent and sustained desire to learn.

These were my conceptions and background when last summer I went to Siasconset, a quiet summer colony on the eastern tip of Nantucket Island, looking straight out to sea. The little cottages, many originally fishermen's houses, are weathered shingle of lovely silver color, and are miniature in scale. In June they are buried under masses of Rambler roses.—*Torrance Fiske*

THE subjects of all the accompanying sketches were found on Cape Cod and the island of Nantucket. Jewett and I started out with the laudable aim of acquiring facility in outdoor pencil-sketching, and chose Cape Cod as a field for our endeavors because of the simplicity and charm of the old houses, the beauty of the countryside itself and because the Cape limited our field, to some extent, geographically. In addition to this we planned to make a short side-trip to Nantucket, as Fiske was staying there, and we had heard from him that "sketching was good."

The trip was made by motor and was a great success as far as the abundance and quality of material found. Our only difficulty was with the natives who wanted to see the "pitchers"—they were forever leaning on our shoulders and insulting us by asking what we were drawing.

The most interesting single architectural feature we encountered was the doorway, both the simple dwelling-house type and the more elaborate and pretentious church entrance. The church doorway at Barnstable attracted us at once. As a matter of fact it was the best part of

the church. It appealed to us because of its excellent scale, and deep shadows. The detail was extremely interesting—this I think was the only instance in which we found Ionic capitals used. The workmanship was beautiful. A group of youngsters who had climbed a tree near us added interest by dropping small twigs on our drawings as we worked.

The Provincetown doorway is an excellent example of the domestic type. The hand of the village carpenter is much in evidence and lends an increased charm to a beautiful design.

The sketches at Siasconset were the most appealing of all to me. We found a village of old houses, built to withstand the severe winters of Nantucket, which seemed to grow out of the soil. The majority date to the seventeenth century, and are a real taste of American vernacular architecture. They make no pretense at architectural adornment, and their charm is entirely one of mass. Their appeal is purely due to the picturesque quality of their small scale, consistent throughout, their sagging roof lines and extreme climatic suitability.

The foregoing gives, in a sketchy way, the reasons for which our subjects appealed to us. We started out with no definite idea of what we were to find; our plan being simply to go along in haphazard fashion and to stop when we found something worth drawing. We acquired a new appreciation of Early American Architecture; a realization that mass counts infinitely more than profuse detail, and that the mistakes of a village carpenter can often accomplish more than the synthetic product of the trained architect—*J. Crawford Byers*



"SNUG HARBOR"

SKETCH AT "SNUG HARBOR," SCONSET, MASSACHUSETTS

By *Torrance Fiske*



SIASCONET
Y - 25 - 25

SKETCH MADE AT SIASCONET, MASSACHUSETTS

By J. Crawford Byers



DOORWAY AT PROVINCETOWN

Sketches Made by J. Crawford Byers



CHURCH AT OLD LYME

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

THE crop of sketches is pretty fair this month and the prize in this class for the period ending November the fifteenth is awarded to Armand Carroll of Philadelphia. We are glad to see so many contributions carrying names quite unknown to us. Many a fellow—and some girls—have had their work reproduced for the first time in PENCIL POINTS. You sketchers who have never submitted your material for publication are not only invited, but urged, to send your drawings for consideration in this department. There is no implied promise to publish everything submitted, but one thing we do promise—every contribution will receive the most careful consideration.

POETRY is scarce this month and not much to brag about at that. Charles H. Jagemann gets the prize in this class and it certainly was a cinch for him as he had no competition:

This is the office where plans are made,
With few good men, who are poorly paid.
Jobs of all kinds are tackled and solved,
No matter how complicated or how involved.

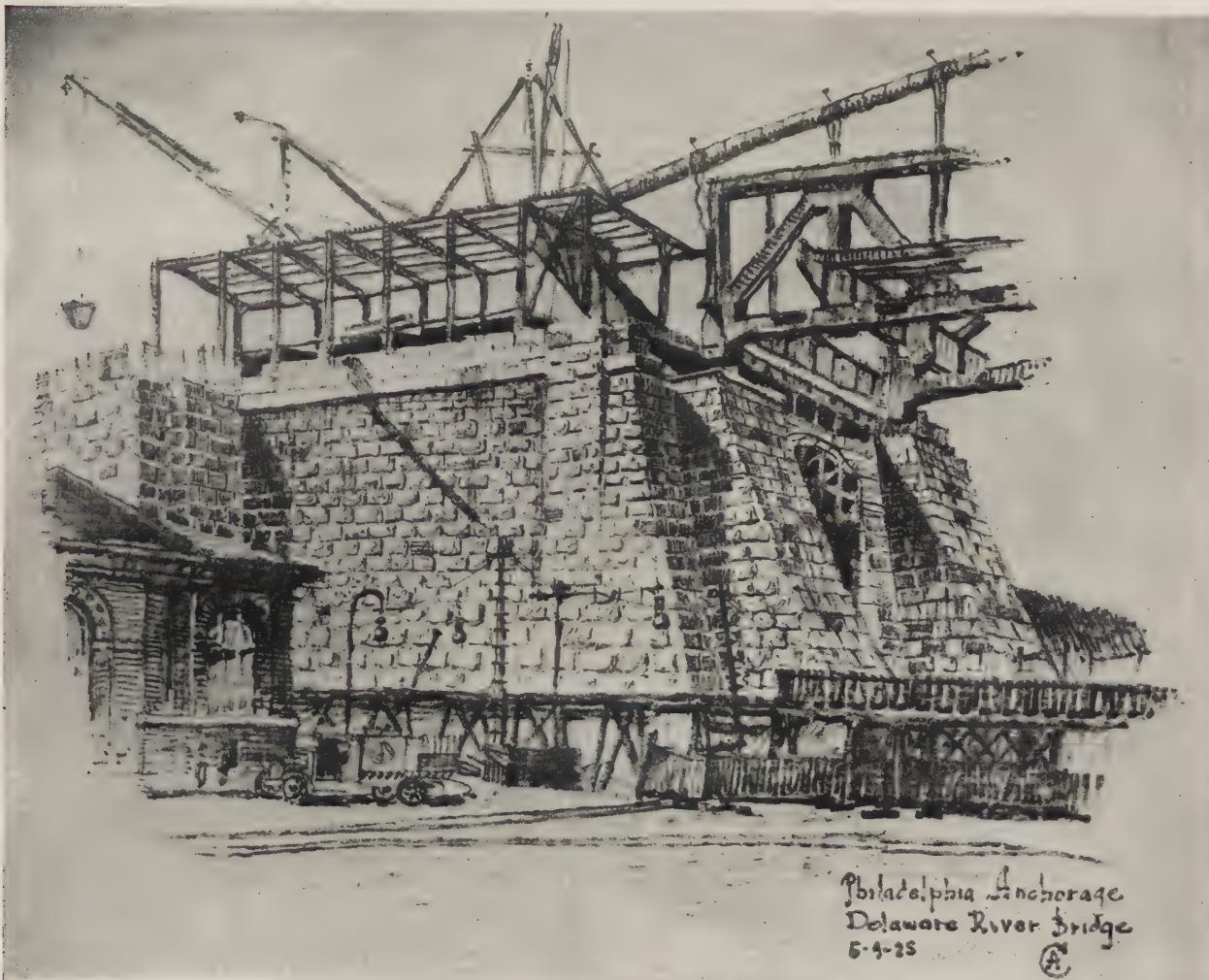
The bosses are gentlemen, of their kind there are few.
As for the head draughtsman,—why he pushes work through.
He whistles and sings all morning long,
Killing the tune of an old time song.

The rest of the bunch are happy and glad,
when the ghost comes around, so more things can be had.
We all have our faults, that we cannot deny,
But we'll strive for good Architecture I'm sure
Till we—cease to exist.

Jiggs

WE THOUGHT of entering a poem ourselves but didn't. Guess all the poets must have gone to Florida and they must all be so busy down there building ten and fifteen million dollar buildings that they just haven't had any time to write poems.

H. C. REIFF, St. Louis, Mo., is awarded the prize in the Cartoon class and the prize for Class 4 goes to Helmer N. Anderson.



SKETCH BY ARMAND CARROLL
(PRIZE—Class One—November Competition)

PENCIL POINTS



CARTOON BY H. C. REIFF, ST. LOUIS, Mo.
(PRIZE—Class Three—November Competition)

Remember! Full particulars of our monthly competitions may be found under this heading in the August and September issues. To those interested who have not access to copies of these numbers, information will be sent on request.

Part II of Knobloch's "Good Practice in Construction", containing 52 plates, duplicating none of those in Part I, is now on the press. Price \$4.00.—Adv.

DO YOU like the plates from Prentice's "Renaissance Architecture and Ornament in Spain," as reproduced in this issue? If so, we shall be pleased to publish more. If you will tell us what you want, we are right here to scramble around and get it for you.



PEN AND INK SKETCH BY HAROLD C. BISHOP

ABOUT the sketch below Mr. Peek has written us: "Apropos of small sketch of myself plus two 'black body-servants' under umbrella would say that laborers receive as high as 35 and 40 cents a day in Luxor, less my seeming luxury be misunderstood!!"



SKETCH OF G. M. PEEK AT WORK IN EGYPT.

PENCIL POINTS



SKETCH BY HENRY R. DIAMOND



BOOKPLATE BY HELMER N. ANDERSON
(PRIZE—Class Four—November Competition)



PENCIL AND WATER COLOR SKETCH BY HAROLD C. BISHOP, REGINA, SASKATCHEWAN

PENCIL POINTS



CARTOON DRAWN BY ROBERT W. HUBEL AND RUSSELL E. YATES

(This drawing represents the return of Mr. Albert Kahn from a six weeks' tour of Europe. The slaves are shown parading before "the boss" and his two brothers, Louis and Moritz. The various department heads are facing the reviewing stand hoping that the work carried on during Mr. Kahn's absence meets with his approval.)

'ROUND THE DRAFTING TABLE

THE CRAB—Head draftsman and realizes it. Has no use for any graduates of architectural colleges—been in the game 35 years. Wants to know who's been using his pet ruling pen—whadd'ye think pen wipers are for anyway—keep your elbows off his table and for gosh sake can that whistle.

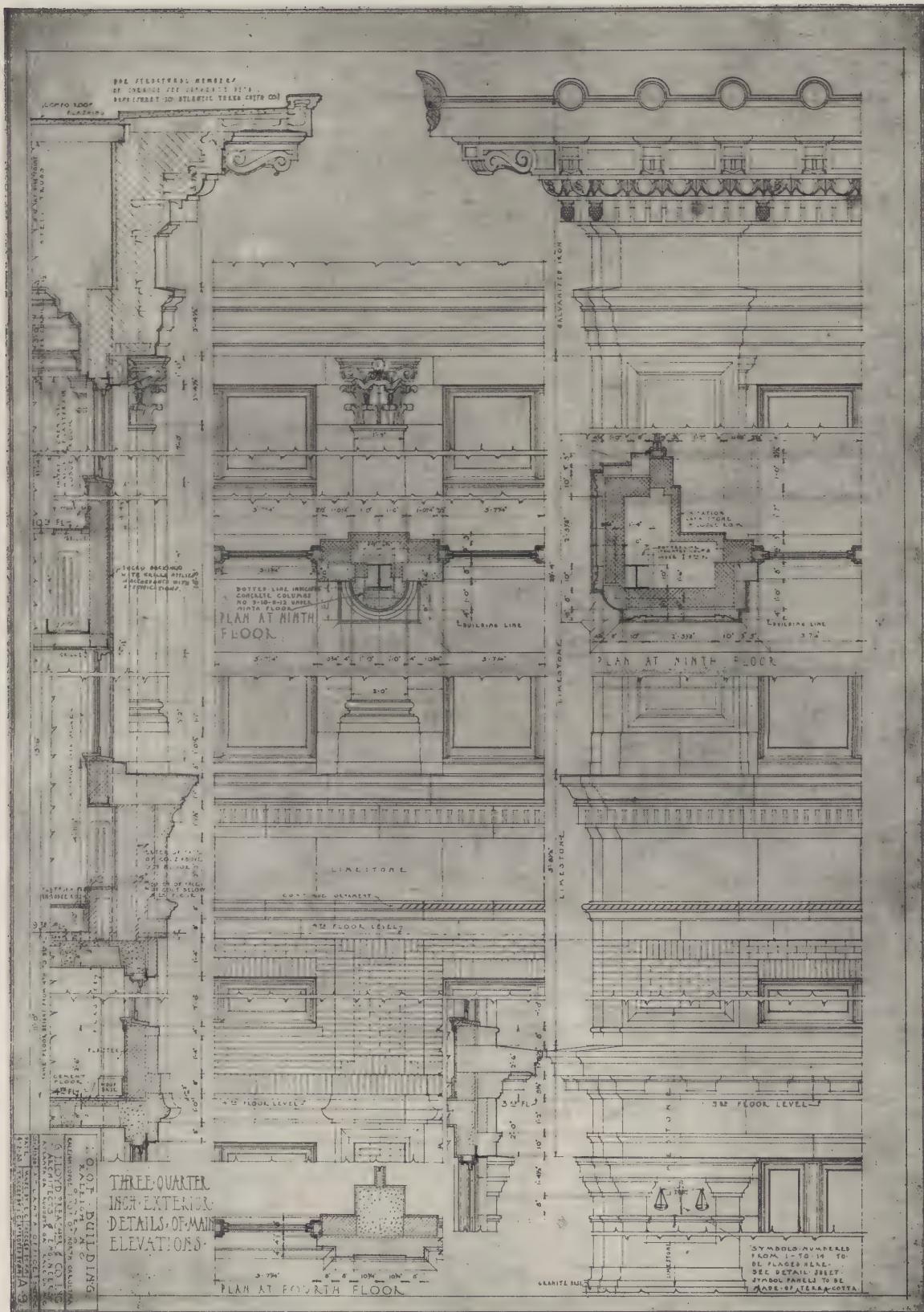
PERCY—You just can't help calling him Percy—for that's his name. The original story book architect, horn rimmers, straight stemmed pipe, and collar open at the neck. And playful! Just listen to Miss Krutz, the steno, scream when he tears tracing paper! Rips it a bit at the time, long and painful, you know. My, what a cut up.

THE BOSS—The guy you can never find when you are stumped on his notes about that Bixby job; but blot that perspective you've been on for three days and he's there every time. You'd be surprised how wrapped up in your career he is, and how fatherly he can talk—when you mention that little raise. But, all in all, he has one excellent attribute, a John Hancock on the weekly check.

THE PEST—Writes specifications, cusses the steno and in his spare time offers—Helpful Hints to Draftsmen! Your treatment's too stiff, or the building is out of line. And what is that, a vine or a fire escape? Oh, for a dark night and a piece of lead pipe!

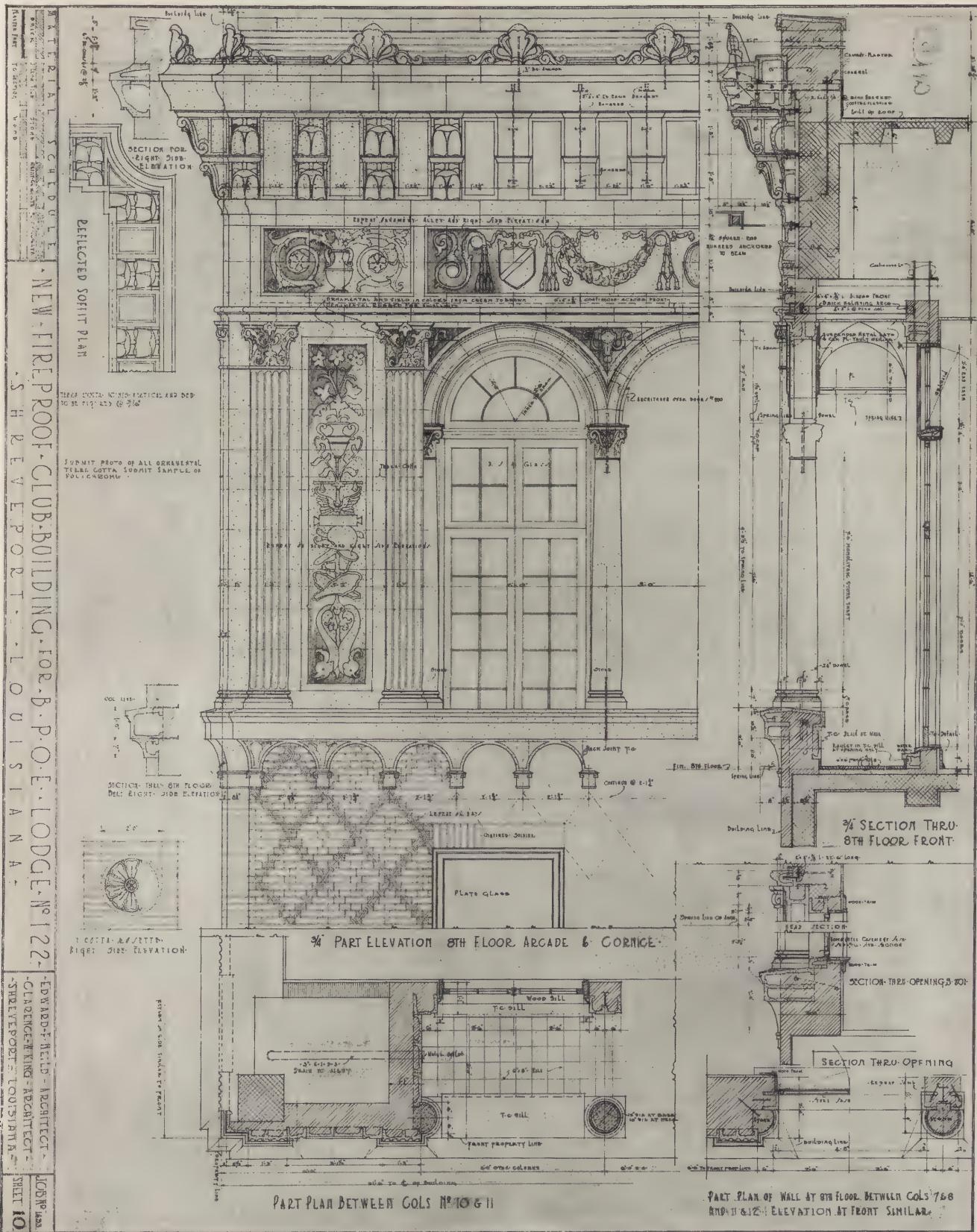
J. Sutton Steffan,
Brookhaven, Miss.

DETAILS OF CONSTRUCTION



I. O. O. F. BUILDING, RALEIGH, NORTH CAROLINA
Designed by Nicholas Mitchell. G. Lloyd Preacher & Co., Inc., Architects.

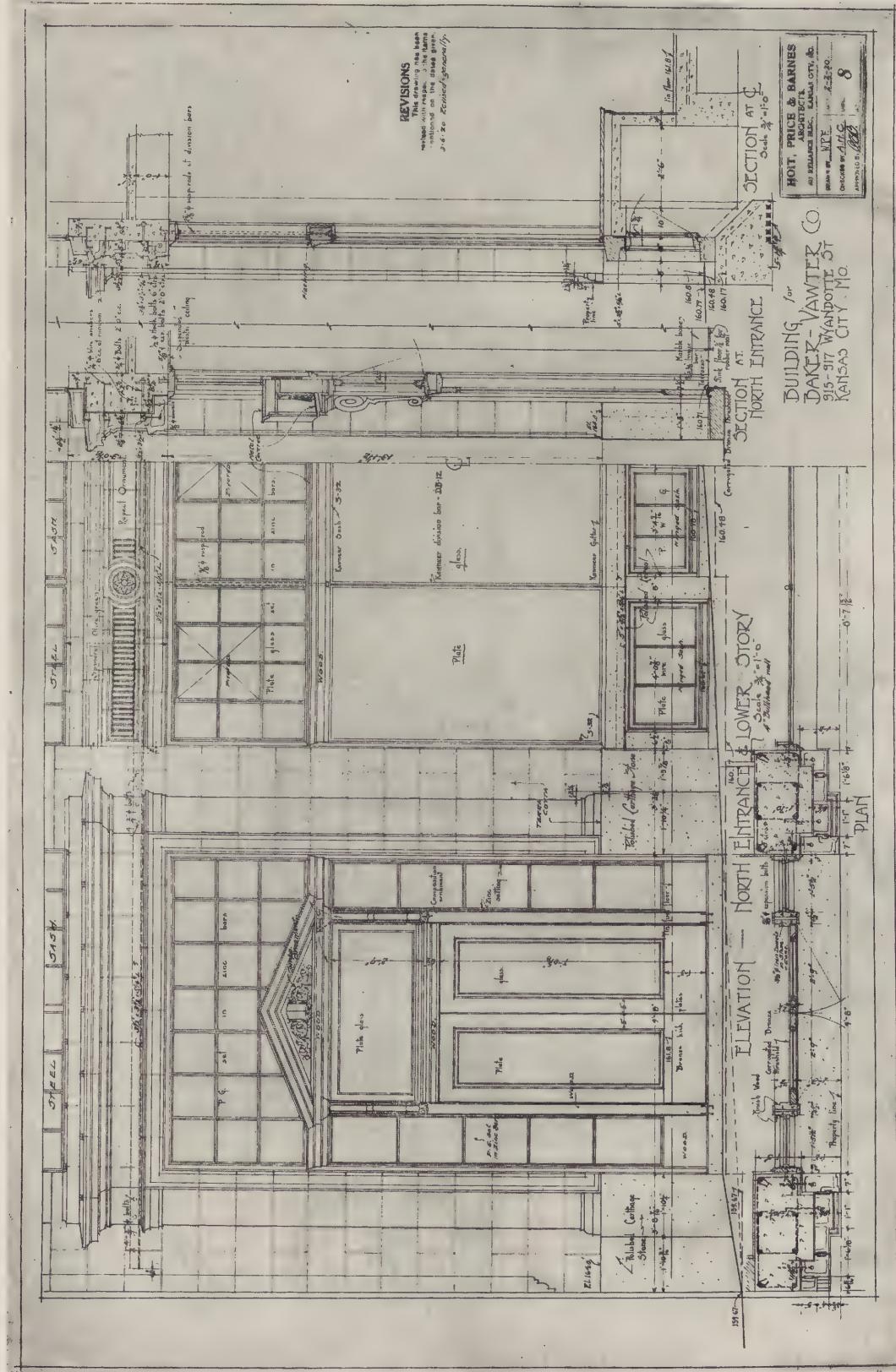
PENCIL POINTS



CLUB BUILDING FOR B. P. O. E. LODGE, SHREVEPORT, LA.

Edward F. Neild and Clarence W. King, Architects.

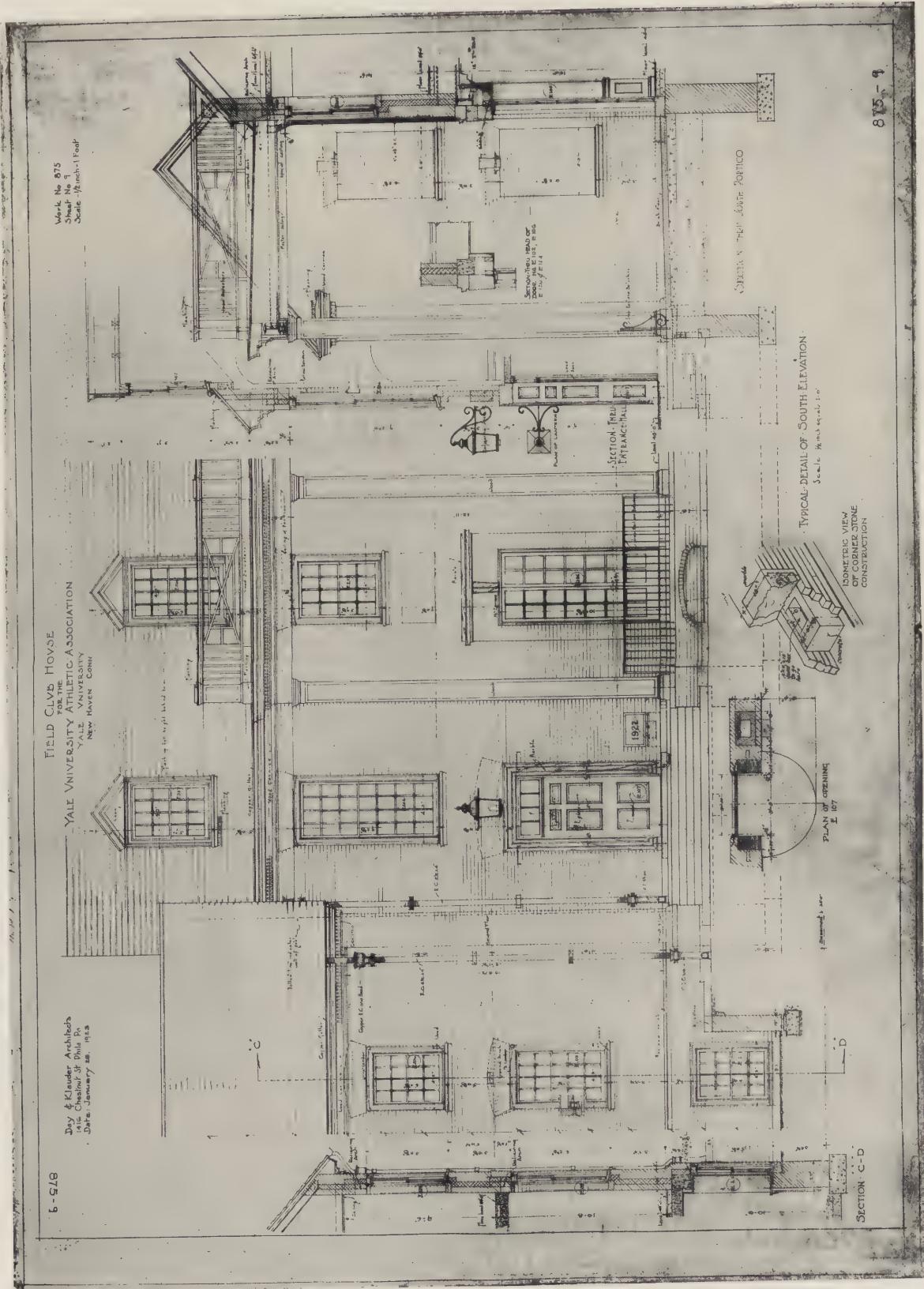
DETAILS OF CONSTRUCTION



BUILDING FOR BAKER-VAWTER CO.: KANSAS CITY, MISSOURI

Hoit, Price & Barnes, Architects.

DETAILS OF CONSTRUCTION



FIELD CLUB HOUSE FOR THE YALE UNIVERSITY ATHLETIC ASSOCIATION, NEW HAVEN

Day & Klauder, Architects.

THE SPECIFICATION DESK

A Department for the Specification Writer

SPECIFICATIONS

By W. W. BEACH

ROOFING AND SHEET METAL WORK, PART XIV

PART XIII in the November issue of PENCIL POINTS contained Division G, Structural Steel, and Division H, Miscellaneous Metal Work, of the General Contract specifications for a Consolidated District School building. The next in regular order are Divisions I, Roofing, and J, Sheet Metal Work.

These two divisions are frequently combined or, when separated, as in the present instance, are susceptible of various "permutations and combinations," dependent upon individual office practice and the customs and preferences of local contractors.

For instance, if the building is to have more than one kind of roofing, such as pitch-and-gravel for flat surfaces and tile or slate for steep inclines, with sheet metal flashing for all or a portion of same, it would be desirable to have a single guaranty cover all roofing and flashing. If this work is made an independent contract it should, for the sake of such guaranty, be made a single division. But, if one is dealing only with a general contractor who provides all guaranties, such contractor can sublet the roofing to more than one concern without worrying the architect.

In cities where there are sheet metal concerns which do no pitch-and-gravel or other flat roofing, or roofing contractors who confine themselves strictly to that branch, the separation of the two divisions is desirable.

There then arises the question as to how comprehensive to make each of the two. We will assume it to be advisable to use a pitch-and-gravel (or slag) roof with self-flashing, carrying a ten-year guaranty. No slate or tile is required for this particular job. (Specifications for these two materials are gotten out by the slate producers' association and by the manufacturers of roofing tile, available upon application.)

Whether or not the duct work is to be included with other sheet metal is also to be determined. There can be no doubt but that is the proper place for it but architects who have formed the habit of employing outside engineers to design their heating and ventilating systems find them most tenacious of the privilege of including the duct work with same, either as a direct part of the steam work or of a separate ventilating contract. The effect of this is to limit competition to large steam contractors, who maintain their own sheet metal departments, or to force their competitors to include the work and sublet it to a sheet metal concern. In any event, it is liable to cause friction by having two sheet metal contractors on the job.

An architect who has his mechanical engineering done in his own office finds the work costing less if the ducts go with the remainder of the work of that trade. The contention that it is necessary to have a guaranty from a ventilating concern that the ducts will do the work expected of them carries little weight inasmuch as, once properly designed, they are very easily supervised during installation and need no guaranty. We will proceed on that assumption.

DIVISION I. ROOFING

Note. (Introductory for all Divisions) The Contract and General Conditions of these Specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these Specifications for Roofing. The Contractor shall refer thereto as forming integral parts of his Contract.

ARTICLE 1. Scope of work.

(A) THE ITEMS under this Division include.

- (1) ALL ROOF COVERING in place.
- (2) ALL FLASHING in connection with roofing.
- (3) SUCH OTHER WORK as is herein set forth.

ARTICLE 2. Materials.

(It will be noted that, in other Divisions, Art. 2 comprehends a "General Description" of the work embraced in the Division. This is unnecessary for Roofing, it being practically a single subject.)

(A) IN GENERAL. All materials for roofing work shall be best quality obtainable for the various requirements, delivered at building in unbroken packages bearing Maker's labels, which shall be delivered to the Superintendent. List of acceptable Makers may be seen at the Architect's office.

(B) FELT shall be tar-saturated, weighing not less than 14 lbs. per 100 sq. ft.

(C) TAR PITCH shall be best grade, straight-run, American coal-tar pitch, having melting-point at about 130° F.

(D) SLAG OR GRAVEL shall be dry, free from dust or dirt, and shall range in size from $\frac{1}{4}$ " to $\frac{5}{8}$ ". In cold weather it shall be heated immediately before being used.

ARTICLE 3. Workmanship.

(A) PREPARATION. The roofing surface shall be swept clean and carefully inspected and the attention of the Superintendent called to any inequalities, cracks or holes that need remedy, as the Contractor will be held strictly responsible for covering any and all roofing surfaces, in accordance with his guaranty. No roofing may be laid without due notice to the Superintendent.

(B) FIRST COAT shall be a uniform coat of the pitch, heated to proper consistency and evenly applied after surfaces have been approved.

(C) LAYING FELT. Over the foregoing pitch there shall be laid 4 plies of tarred felt, lapping each sheet $24\frac{1}{2}$ " over the one preceding and mopping back with pitch the full width under each lap, so that, in no place, shall felt touch felt. All felt shall be laid free from wrinkles and buckles.

(D) TOP-COATING. Over the entire surface of roof, covered as above, shall be poured from a dipper a uniform coating of pitch into which, while hot, the slag or gravel shall be embedded.

(E) FLASHING shall be constructed, at all intersections between roofs and vertical surfaces, by mopping the side-walls with pitch for entire space between roof and top of flashing and extending 2 plies of roofing felt up against same to a uniform line 8" above roof at high points and 12" above at low points. Flashing shall be mopped between coats and upper edges secured with wood lath rigidly nailed. Exposed surfaces shall be thoroly mopped with hot pitch. Similar flashing, without lath, shall be provided under all metal cap-flashings, such as around skylights and curbs.

(F) WEIGHT of pitch used shall not be less than 200 lbs. net per 100 sq. ft. of completed roof. Gravel shall weigh not less than 400 lbs. per 100 sq. ft. and slag not less than 300 lbs. per 100 sq. ft.

(G) PATCHING, repairs, changes or other work, after roofing has been completed, shall be done only in the presence of the Superintendent and shall be equal in every particular to the approved work adjoining.

(H) ROOF CONNECTIONS shall be of copper of proper size and approved design, suited to this class of roof. One shall be placed at top of each down spout, ready for connection by Plumber. They shall be set on roof slab (without

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sump) and extend thru same and shall be built into roof covering and flashed in such manner as to be water-tight and to properly serve the intended purpose. Drainage from same shall be properly cared for until the Plumber has made his connections. Each outlet shall be supplied with an approved heavy copper bee-hive or basket strainer.

ARTICLE 4. Inspection and Guaranty.

(A) FINAL INSPECTION. Just before completion of the contract, the Contractor shall make a careful examination of all parts of the roofing and flashing, make all necessary repairs, in accordance with Par. G in preceding Article, and place all portions of roofing and flashing in perfect condition, ready to submit for acceptance.

(B) GUARANTY. The Contractor, in undertaking this work, hereby guarantees all roofing and flashing applied under this contract to be and remain water and weather-tight for a period of ten years after the final acceptance of the work and agrees to repair and make good, in whole or in part, as may be required, promptly on demand, any and all imperfections which, in the judgment of the Architect, may be due to defective material, workmanship or method of installation, which may appear during the term of the guaranty, and including any other work disturbed in connection therewith. Connections to outlets are included in the guaranty.

DIVISION J. SHEET METAL WORK

Note. (Same as introductory to Division I).

ARTICLE 1. Scope of Work.

(A) THE ITEMS under this Division include:

- (1) ALL SHEET METAL WORK in connection with Roofing.
- (2) ALL SKYLIGHTS AND VENTILATORS.
- (3) LOUVRES FOR FRESH AIR INTAKES.
- (4) ALL SHEET METAL DUCTS AND REGISTER FACES.
- (5) SUCH OTHER WORK AS IS HEREIN SET FORTH.

ARTICLE 2. General Description.

(A) SKYLIGHTS shall be provided, with puttyless copper bars and wire glass.

(B) VENTILATORS shall be provided on skylights and to vent roof spaces and toilet room ducts.

(C) COPPER LOUVRES shall be provided to protect fresh air intake.

(D) ROOF SCUTTLE AND CURB shall be covered with copper.

(E) COPPER BOX shall be provided, with cover, for hole in corner-stone.

(F) DUCTS shall be installed in ceilings, partitions, chases and attic as shown, with extensions to or from register faces in each story. Fans will be provided complete, with housing, by Heating Contractor but this Contractor shall provide duct work complete, including indirect radiator housing, extensions from air intake to fan inlets, from fan outlets to all fresh-air ducts and all fresh-air vent and re-circulating ducts of every description.

(G) REGISTER FACES shall be provided for all fresh air and vent openings, including inlets and outlets to radiator recesses.

(H) GALV. IRON LINING, with asbestos backing, shall be provided in radiator recesses.

(I) BLACK IRON HOOD shall be provided over kitchen range.

ARTICLE 3. Materials.

(A) GALV. IRON shall be an approved make and brand of copper-bearing sheet iron of the gages specified for the various locations but, in no case, to be less than No. 26 gage. All bolts, screws, nails and rivets in galv. iron work shall be galvanized. All galvanizing shall completely cover all surfaces with a heavy coat, without breaks.

(B) COPPER shall be cold-rolled, of the weights specified for the various locations but, in no case, to be less than 12 oz. per sq. ft. All nails and rivets in copper work shall be copper.

(C) SOLDER shall be best grade "half-and-half" (approximately $\frac{1}{2}$ lead to $\frac{1}{2}$ tin), applied with approved rosin or cut-acid flux, as may be required.

(D) BLACK IRON for kitchen hood shall be as above specified for galv. iron, without the galvanizing.

(E) WIRE-GLASS for skylights shall be $\frac{1}{4}$ " thick with rough, ribbed or hammered surfaces.

(F) CANVAS for connections from fan outlets to ducts shall be best quality 12 oz. cotton ducking, soaked in linseed oil to be air-tight.

WORKMANSHIP

ARTICLE 4. Skylights.

(A) CONSTRUCTION. Skylights shall be of approved "puttyless" design, built of galv. iron framing, with all members designed proportionate to size and span and all parts exposed to the weather covered with copper in approved manner. Minor division bars may be made of bent copper of approved cross-section, without iron core. Plates shall be rigidly anchored to curbs and all bottom members properly flashed. All skylight-bars, cross-bars and bottom receiving-bars shall be provided with proper gutters designed to carry condensation-water to roof outside. All parts shall be absolutely water-tight.

(B) SHOP DRAWINGS and Maker's specifications of skylight construction shall be submitted for approval as provided in the General Conditions.

(C) GLAZING. All skylights shall be glazed with wire-glass of full sizes to fit between bars and set in accordance with approved details. Spring-members shall be adjustable, with screws or bolts, to tightly clamp the glass. All glass shall be satisfactorily cleaned before work is accepted.

(Note. There is really little need of skylights in ordinary school house design and they should be avoided wherever possible, being one of the most fruitful sources of annoyance (next to outside gutters and down-spouts) of any features of building construction which may later harass the Buildings and Grounds Committee.)

ARTICLE 5. Ventilators.

(A) TYPE of ventilator shall be in accordance with sample in Architect's office, or similar approved design, and shall be submitted and passed upon before delivery.

(B) SIZES shall be as called for and shall be taken to be the least inside diameter in each instance.

(C) CONSTRUCTION shall be as specified and in accordance with the Maker's standard details, with all exterior parts of 12 oz. copper, except the roof or top portion, which shall be 16 oz. Where so indicated, the tops shall be flat and glazed with single sheets of $\frac{1}{4}$ " wire-glass. All ventilators shall be well secured in place on approved box-bases, flashed and counter-flashed in best manner. Those over toilet room vent-ducts shall be provided with balanced dampers, complete, with cords to operate from location directed in each case. Each ventilator shall be equipped with bird-screens of No. 14 copper wire in $\frac{1}{4}$ " mesh, rigidly attached. Each of two larger ventilators shall be fitted with center steel finial, 4'0" high, with eye at top and sufficiently strong to serve as masts for attachment of radio aerials.

ARTICLE 6. Ducts and Radiator Housing.

(A) INDIRECT RADIATOR HOUSING. The 4 sets of indirect radiation in basement shall be housed in No. 18 gage galv. iron on framing of $1\frac{1}{4}$ " steel angles, all put together and riveted in the most rigid manner. Housing shall include bottom plates.

(B) FRESH AIR INTAKE shall be built as detailed, with rigid louvres and copper wire bird-screen, as specified for ventilators. Jambs, sills and mullions shall be reinforced with yellow pine, included under "Carpentry." Ducts of No. 18 gage galv. iron shall extend from intake frame to the two first sets of indirect radiation and be riveted to collars of same. Each duct shall be fitted with full-sized damper as detailed, with approved quadrant for holding rigid at any angle. Openings to radiators from each fresh-air duct shall have rim fitted with pins or detachable collar to provide for the ready removing and placing of muslin air-strainer. In-take ducts shall extend from radiator housings to fans and from fans to inner radiator sets and shall be properly connected to collar in each instance. Doors of same material as ducts, 20" x 24", shall be provided wherever necessary to render all sides of radiation easily accessible. These doors shall be hung on $2\frac{1}{2}$ " x $2\frac{1}{2}$ " galv. or bronze butts and be secured with hasps and staples in such manner as to be satisfactorily air-tight. All connections from ducts to fans shall be effected by means of a loose collar or bellows of cotton ducking, with edges rigidly secured to collars on ducts and fans with riveted or bolted steel bands. These bellows shall have sufficient slack to prevent transmission of vibration without impeding passage of air.

(C) DUCT SYSTEMS. Ducts shall be extended as shown from each of the two fan systems to the risers and thence, with necessary bends and runs, to fresh-air register-faces and grills. Vent-ducts shall extend from vent-register-faces in the various locations shown, with necessary bends, risers and horizontal runs, either to emit into roof space at level

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18' above third story ceiling or, in case of all toilet room vents, to extend to and connect with bases of roof ventilators. Ducts shall be of sizes shown or, where limiting conditions prevent, may be changed by special permission but without reduction of cross-sectional area. All vertical ducts and small horizontal ducts shall be of No. 26 gage metal, sides of horizontal ducts wider than 16" of No. 24 gage, and tops and bottoms wider than 16" up to 24" of No. 24 gage. If wider than 24", tops and bottoms shall be of No. 22 gage, except that all parts of ducts from inner radiator housing to first branches shall be of No. 18 gage. All ducts shall be rigidly supported on or from structural members of building and shall be put together in best manner with double-lock seams, with all cross-joints lapped in direction of flow of air and soldered. All changes of direction shall be effected by curves of largest possible radius, none less than 4" on short side. Each duct shall be enlarged at end to form box to fit register-face and, if at right angle, shall have curved deflector to meet same. All connections to register-faces shall be neatly flanged all round and shall be provided with approved method for attachment of register-faces. All ducts larger than 60" perimeter shall have reinforcement of light steel angles all round, about 6'0" o. c. For large ducts at radiation housing, these angles shall be 1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ ", about 4'0" o. c. All angles shall be attached by means of galv. rivets, $\frac{1}{4}$ ", 6" o. c., for small angles and $\frac{1}{8}$ ", 5" o. c., for 1 $\frac{1}{4}$ " angles. Where two or more ducts adjoin, single air-tight partitions may be used between them. If such ducts are both vent, the partition may be omitted (unless one is a toilet-room duct) but no partitions shown in fresh-air ducts may be omitted. Structural members shall be properly framed around duct openings with due allowance for passage of full-size ducts.

(D) DIRECT RADIATOR ENCLOSURES. Certain radiators in vestibules shall be enclosed as shown, with enclosures lined with No. 26 gage galv. iron, covered on back with heavy asbestos paper wherever wood members are located within 6" of radiator. The iron sheets shall extend from floor to top of radiator in each case and shall curve over tops of same to form deflectors, with flange connections to tops of grills.

(E) REGISTER-FACES. Each fresh-air and vent opening shall have a register-face of the size indicated, neatly finished against wood or plaster and firmly secured in place. Register-faces in plastered walls shall be white-japanned, those in vestibules bronze plated and all others black-japanned. In general, fresh-air register-faces shall have lower edges 7'0" above floor and vent-register-faces 3" above floor, the latter to be readily removable for cleaning ducts and to be neatly cased in connection with base, as called for under "Carpentry." Grills in front of vestibule radiators shall be of special design, as detailed, and shall also be removable to afford access to valves.

(F) SHOP DRAWINGS of all duct and register work shall be submitted for approval, as specified in General Conditions. These drawings shall be in accordance with actual measurements taken at building and shall take note of all interferences and shall represent actual conditions.

ARTICLE 7. Miscellaneous Items.

(A) SCUTTLE AND CURB shall be covered with copper as specified, with all seams double-locked in best manner and fastened to wood-work by means of nailed cleats or lugs, locked into seams. No nails may be driven thru surface of copper. Scuttle shall fit neatly over curb, not too tight, and the latter shall have flashing extend over or under roofing material, as case may be, to make thoroly water-tight.

(B) SLIDES IN LANTERN-ROOM PARTITION shall be of No. 22 gage galv. iron in frame of same, all as detailed. Slides shall be held in place by sash-cord running over pulleys as shown, with piece of film in cord, placed directly over machine, to act as fusible-link.

(D) COPPER BOX for corner-stone shall be provided and delivered to the Superintendent to receive deposit and then permanently sealed and soldered by the Contractor and made absolutely air-tight and moisture-proof.

(E) HOOD over kitchen range shall be of No. 20 gage black iron, with frame and supports of 1 $\frac{1}{4}$ " steel angles, all as detailed and neatly riveted together.

HISTORICAL SKETCHES OF AMERICAN BUILDING INDUSTRIES

Origin and Development of Metal Doors and Trim
This article, delivered as an address before the Construction Club of New York, by Mr. John A. Westman, is the first of a series of sketches dealing with important branches of the building industries. Other articles dealing with other industries will appear in these columns from time to time.—Editor.

Doors have become such a common human necessity that they are taken as a matter of course, and the average person pays little or no attention to them—in fact the word DOOR is very similar in most languages and the meaning of it so well understood that a definition is rarely asked, and most people would hesitate before being able to offer a proper description. Yet, it is and has always been a protective contrivance; the qualities of which mean much to human comfort, safety and even life.

Ever since shelter became a necessity as a defense against the elements and other untamed foes, some sort of a door has been indispensable. Perhaps they began with just a narrow opening to a larger protected space of some sort, at which point alertness for defense could be concentrated. It is easy at any rate to imagine how this doorway was first barricaded with stones or branches; gradually improved by hides and various contrivances until some crude pivoting device developed, whereby a large block of stone, or perhaps a section of a tree could be more or less readily swung into place. Much human thought has been centered on doors and doorways since that time to bring them up to present day standards.

It may be in order to introduce our little talk on metal doors and trim, their origin and development by some reference to the early types of doors in general.

Actual records of the first use of doors appear to be lost in the mists of antiquity. However, history makes mention of the use of all metal doors as early as c-1897 B. C. when Kung Kin of China had iron (probably wrought) doors made for his palace entrances. These doors were ornamented with wrought bronze and may have been the prototype of hollow metal doors.

Dr. Geo. C. Gerland and Daniel G. Brinton in their history of "Races and Peoples" mention stone doors c-3000 B. C. used by the Incas of Peru on forts, and wood doors on palaces and temples; doors being used primarily for defense. The interior doorways had curtains and doors operated vertically.

In c-2000 B. C. the Assyrians used wood and metal doors in exterior walls. These doors were hinged. In c-2500 B. C. Pueblo Indians on communal houses or joint tenements used doors of wood and hides.

The wall of China c-1500 B. C. had hinged gates of wood and metal.

The Encyclopedia Americana, 1903, speaking of Egypt B. C.—"The doors themselves in private dwellings of antiquity were usually of wood, and in structures for religious or public purposes, of metal and occasionally of marble and turned on pivots, not hinges. These pivots were often of stone."

Arthur E. Weigall in "Antiquity of Upper Egypt" writes of Acasia wood doors inlaid with gold, swinging on pivots in the temple of Amenhotep 111, c-1411 B. C.

Prescott in "Conquest of Mexico" states that Pizarro found doors of solid gold in the Inca Palace c-1540 or 1550 B. C. Apparently, price was not, in those times, of paramount consideration, or perhaps then as now abundance of available material governed.

Records show the use of wood doors with bronze strips in Egypt and Chaldaea (Babylonia) in c-3500 B. C. These were pivoted and not hinged.

No early Greek doors appear to have been preserved, and of Roman doors, the only extant examples are the magnificent bronze doors of the Pantheon 124 A. D., somewhat altered in the 16th Century.

The value of bronze metal and the ease with which it could be broken up and cast, or made into coins may have caused the disappearance of some of these ancient bronze doors both in solid or hollow cast form.

Doors discovered in King Tut's tomb by Lord Carnarvan in 1922 were of thin bronze sheets applied to panelled frames of wood. These doors are 3,500 years old and photographs of them may be seen in the Egyptian Depart-

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ment of the Metropolitan Museum of Art in New York City.

Early records show doors of the King Tut type made of single panels of wood. In Egypt where the climate is intensely dry, there would be no fear of their warping, but in other countries, it would be necessary to frame them, which, according to Vitruvius, Roman Architect and Engineer, was done with stiles and rails in the third century.

King Solomon's Temple in 1000 B. C. had doors described as made in timber and of olive wood. Homer dwells upon doors cased in silver or brass.

This early method of using thin sheets of the more precious metals to encase wood panels displays the same thought later carried out in the so-called Kalamein construction, and shows the persistence of practices when once originated.

Of metal doors of early origin, preserved for our time, probably the best known today are the bronze doors of the Baptistry in Florence by Andrea Pisano and by Lorenzo Ghiberti.

Ghiberti received his commission to execute these doors in November 1403. It was not until April 1424 that the doors were completed and set up. Evidently the making of doors was a labor of love and his production schedule therefore was not on the same basis as business is performed today.

Iron doors were known about 2000 B. C., although the iron age is generally quoted as occurring about 1100 B. C.

There are in existence many notable examples of cast bronze doors of a later period, such as Byzantine 330 A. D. doors of the Hagia Sophia at Constantinople.

As late as March 10, 1925, a cable was received in New York from Geo. A. Reisner, Director of the Harvard University, Boston Museum of Fine Arts Egyptian Expedition, definitely establishing the discovery of a tomb near the Giza Pyramids, as being some 1700 years older than the period of Tutankhamen. The burial chamber of this tomb was closed by a door, which is not described but indicates the use of doors in that period.

Today we can hardly think of doors without also giving a thought to hinges and locks, without which doors would be more or less useless. The exact period when the hinge was substituted for the pivot in the use of doors is not known, but evidently the change brought about another method of strengthening and decorating doors with iron bands. The strap hinges and escutcheons around the lock mechanism form elaborate ornamentations, but this is a subject by itself and we are obliged to leave it in more competent hands for discussion.

With various materials at hand we find the early people selecting their materials for doors with an eye to their suitability for the purpose in mind. Their first idea seems to have been adequate protection. For this they found iron and other metals admirable, and as their skill developed they used these metals for ornamental purposes as well. Today we find combined in our metal doors utility and protection together with great attractiveness.

The industrial or production era ushered in by the application of steam and other mechanical power brought a new realization of the enormity of waste by fire losses, and the importance of the proper protection of a doorway attracted some attention. The single plate iron door remained, however, the only available fire stop in door openings until the modern introduction of wood doors covered with metal. At first an alloy of zinc, lead and tin called Calamin was used, to form a protective coating on the light iron sheets applied to the wood. This gave rise to the German designation "Kalamein" for this type of door. This name has come to be used for wood construction covered with light metal of various kinds; as we sometimes speak of bronze Kalamein, which is of course a misnomer.

Tin clad fire doors apparently were introduced by Mr. Edward Atkinson of New England, a cotton mill owner, who did much in fire prevention, starting about the year 1876. He was assisted by Mr. Byron Weston, who invented the sliding devices for doors about 1877.

In principle the tin clad door is a derivative of the tin roof applied to wood roof boards. This type of door has largely taken the place of the old heavy iron door which was commonly used in fire walls. Owing to the fact that iron, in actual fire, becomes red hot and

transmits great heat, at the same time bulging and warping, thereby permitting entrance of sparks, it was gradually superseded by the tin clad door.

Mr. Atkinson invented the automatic release. The fusible alloys used by Mr. Atkinson in his fusible links were in turn invented by Sir Isaac Newton, the great scientist.

From about the year 1880, Campbell and Bantosell, a New York or Brooklyn firm, did much to popularize metal covered wood work. This type of building trim reached its full development in the early part of the 20th Century, when such structures as the Barclay Building at 200 Broadway and the Metropolitan Building at 23rd Street were equipped with it.

The development of the steel frame building again called attention to the necessity of making these tall buildings more fire safe than had previously seemed necessary for the low type of building, and the movement for fire safety and fire protection assumed world wide interest; an organization in England called the British Fire Prevention Committee was founded in 1897, functioning on similar lines to the National Board of Fire Underwriters in this country. This Committee called a nationwide congress which assembled in 1903. This congress recognized that fire protection comprises both fire prevention and fire fighting, and the invitations sent out extended to architects, engineers, surveyors, municipal officials, legislators and insurance officials. They met in council with professional and volunteer brigade chiefs, and salvage officials. The work accomplished in these four days at this international congress was truly amazing. If this subject aroused such enormous interest in Europe with a comparatively low fire loss, what concern should it not be on this side of the Atlantic with our enormous yearly fire waste and our much taller buildings?

In the late 80's Charles P. Dahlstrom came from Stockholm to this country, and the development of the metal door as we know it today really starts with this man. He was a mechanical genius and after being employed in various capacities he became connected with the Fenton Metallic Company of Jamestown, New York, which later became the Art Metal Construction Company. Here he found the first attempt being made on any considerable scale to replace wood furniture with that of metal. Filing cases and desks were fashioned of sheet steel, and in order to make them sell, were painted to imitate wood grain. Banking institutions were the principal customers, and with the introduction of metal filing cases, complete banking screens and counter equipment were added to this line. These screens called for doors which also had to be made of metal and in the construction of these doors the old joinery methods of wood door construction were largely followed. The doors were heavy and quite expensive.

The growth of fireproof building construction and the consequent demand for metal doors gave Mr. Dahlstrom a clear idea that here was the field for his ingenuity, experience and energy. During several years of experimental work he developed a system of metal door construction which would employ lighter gauge metal, be stronger and more artistic in appearance, and which could be produced for a fraction of the cost of the more cumbersome construction then being used. He patented his invention and submitted it to his employers who did not feel justified in taking it up, ingenious as they deemed it to be, because they could see no way of actually carrying out the ideas in practice. In February, 1904, Mr. Dahlstrom formed a small company to carry on the work as a separate enterprise.

It must be remembered that in those days acetylene and electric welding were unknown; rivet fastenings being employed on all joints. Examples of this early work are to be found in the United States Express Building, New York, and also in the Singer Tower in the same city.

The construction having been successfully worked out, crude fire tests were made; and no weaknesses developing specimens were sent to the laboratories of the National Board of Fire Underwriters in Chicago. After the test, which was entirely satisfactory, the product took its place as an approved fire door.

Along with the door, the necessary accessories such as jambs, bucks, casings, transoms, sidelights, etc., had to be developed. In this work a new method for drawing or

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rolling moldings from strip steel was utilized and dies designed for the various shapes required. As a means of sustaining the company during these experimental days, the molding branch of the business was developed commercially, the American Car and Foundry Company using a number of shapes in the construction of steel cars used on the London subways. This later led to the design of the pullman steel sleeping car and the steel equipped dining car.

Aside from the mechanical difficulties which had to be smoothed out, a proper finish had to be devised. In the early days the public demanded doors in imitation of wood. Fortunately now, however, the material is being treated more frankly by most users as a metal product, without any attempt at camouflage.

About 1908 the acetylene welding processes were perfected, making it possible to produce hollow metal doors without infringing the Dahlstrom patent. Mr. J. W. Rapp engaged in the business, producing a light metal door in considerable quantities. One of the first buildings to be equipped with this material was the Fifth Avenue Building on the site of the old Fifth Avenue Hotel. Another pioneer manufacturer was Mr. A. J. Ellis, and others have become engaged in the work in various parts of the country.

I feel that much is yet to be accomplished in perfecting and extending the use of fireproof construction through a better understanding on the part of owners and the general public, of the many advantages involved. In many instances fire-proof construction is employed only because required by law, and not because of an appreciation of additional values and safety entirely apart from legal considerations.

Hollow metal door construction is now being employed in very large units in the equipment of huge power stations and other similar structures. The largest hollow metal unit in existence in this country of which I have knowledge is a pair of hollow bronze doors 28 feet high, 13 feet wide and ten inches thick, installed in St. Joseph's Cathedral, Buffalo, N. Y. after designs by Aristedes Leonori of Milan, Italy.

Those of us intimately connected with the industry feel that while much has been done in developing and perfecting methods, much more can and will be done in future. We bespeak the active cooperation of members of the Construction Club and the architectural profession generally, and feel justified in assuring you that the research departments and technical staff of all the manufacturers are ready to place their complete facilities at your disposal.

MEETING OF THE PRODUCERS' RESEARCH COUNCIL

THE Semi-Annual Meeting of The Producers' Research Council, which was held in Chicago on November 10th and 11th, was a most enthusiastic and successful affair. Members of the Chicago Chapter, A.I.A., and the Illinois Society of Architects, were all invited to attend the sessions, and a number of them were present.

The first session on Tuesday morning was taken up with Roll Call, Reading of Minutes, and Address of the Chairman of the Council, Mr. O. C. Harn; and Welcoming Speeches by Mr. H. B. Wheelock, President of the Chicago Chapter, A.I.A., and Mr. Byron H. Jillson, Acting President, Illinois Society of Architects.

In Mr. Harn's speech he mentioned, among other things, two objectives of the Council, the first being that of future activity in bringing together Architects and Producers, this object having many developments, some of which are now seen clearly, but others will develop as the movement goes along; a number will in fact be slow in developing. The other point is that of immediate use of the individual service which the Council can render its members through the Scientific Research Department of the Institute, and in turn render service to the architects through the same agency, this being a matter of today and not the future.

Mr. Wheelock welcomed the members of the Council very heartily, if for no other reason than that they were affiliated with the Institute, and the Chicago architects have great pride in their organization. He considered the Council not as individuals but as a group working for the architects and searching down deep to help get rid in the future of some of the troubles of today. He felt that the organization was doing great things of mutual benefit, and brought out the

fact that the Council was also working along the lines of standardization, which is one of the objectives of the Institute.

Mr. Jillson, who is acting in place of Mr. Fox, welcomed the Council in all sincerity and wished for the success of the efforts being made for cooperation with the Institute.

Mr. Harn, Chairman of the Council, mentioned a number of instances in which direct benefit to the architects had been obtained through contact with the Scientific Research Department, in that advertising matter had been entirely revised along suggestions made by them, so as to make the matter of much more benefit to the Institute members.

Reports were rendered by the Membership Committee, the Bulletin Committee, and the Educational Committee, the latter dealing particularly with the subject of films, lectures and lantern slides of an industrial nature, for which a plan of cooperation is being worked out, whereby they may be available for Chapter meetings and Collegiate Schools of Architecture.

Plans were discussed for making even a closer contact between the Institute and the Council in the future, for furthering the objectives of each organization.

At the afternoon session Mr. N. Max Dunning, Chairman of the Structural Service Committee, A.I.A., and Technical Director of the Scientific Research Department, A.I.A., gave a most enjoyable and instructive talk on the movement as he has seen it in the last few years and the future activities which lay before it. He brought out the thought that the trend of the times makes it necessary for an architect to become more of a business man, and the business man realizes more and more the need of cooperation with a man with a contemplative mind and a detached point of view. He felt that the possibilities of close cooperation between the Institute and the Council were very great indeed and were hardly fully realized, even by those who have been most active in cooperation. He felt that a complete understanding of each other's problems would be of the greatest benefit to the building industry, and mentioned one of the problems of keeping down the increasing cost of living by the best possible construction and workmanship.

Mr. Coulton, of The Tyler Company, mentioned the fact that all those interested in the movement should get into it at once and not stand aside and wait until the program is completed.

After a most enjoyable dinner at the Club House, the members of the Council were invited to attend a Joint Meeting of the Chicago Chapter for that evening. Mr. Wheelock, after the regular business of the Chapter had been disposed of, turned the meeting over to Mr. Dunning, who explained to the architects who were not familiar with the movement just what it was all about, outlining the work and mentioning the need of the younger architects particularly, for some responsible source from which they could obtain information which they often lacked, and the Producers' Council, with the Scientific Research Department of the Institute, was supplying this need.

Mr. Jillson spoke again of his interest in the work and mentioned several possibilities of service. Mr. Dunning brought out the fact that the Council movement, which was affiliated with the Institute, was an actual and real affiliation, of which the Institute should get as much benefit as possible.

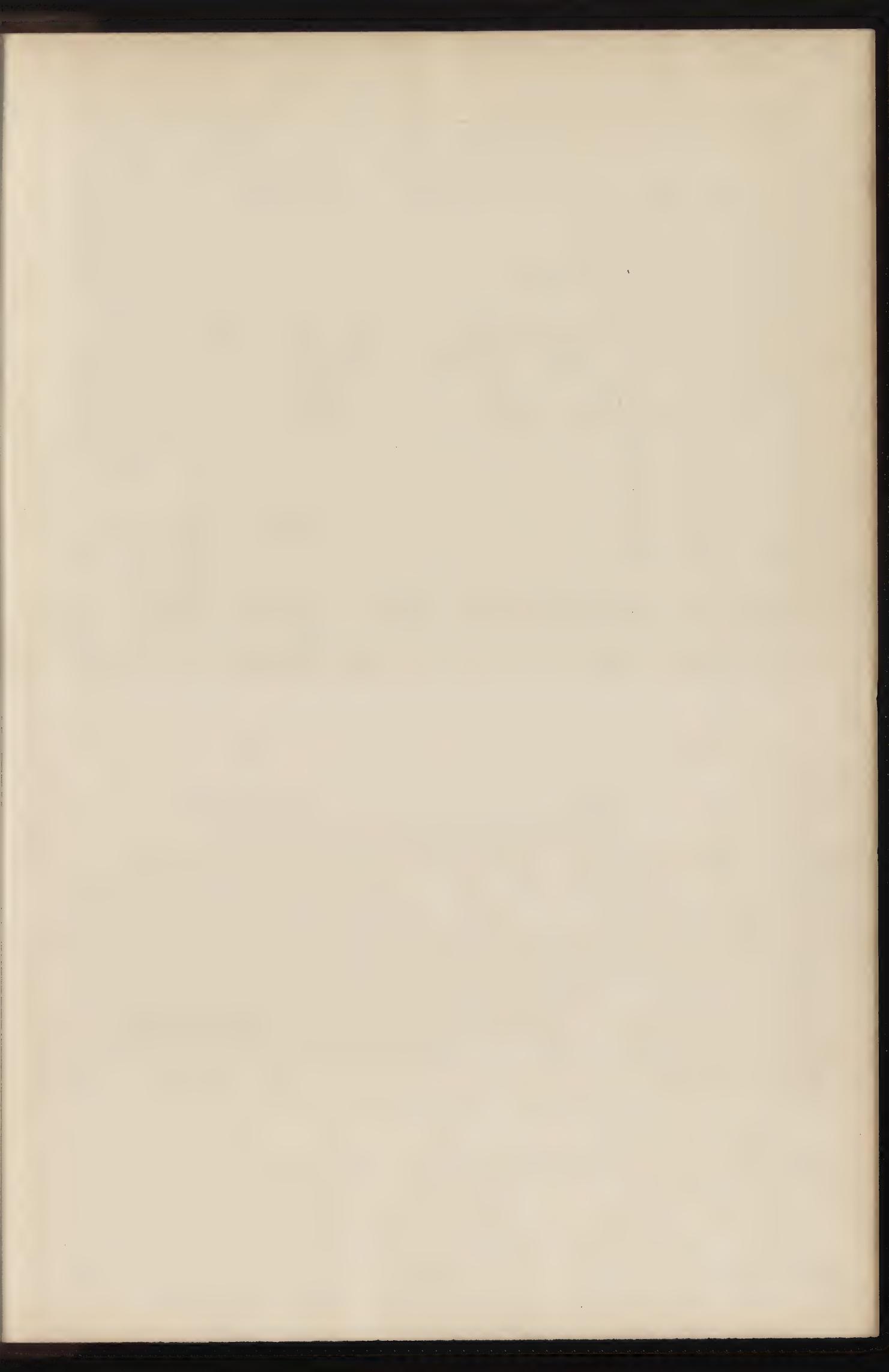
Mr. Harn gave further information in regard to the Council's work, and then those present listened to a scholarly address by Dr. G. C. Mars, of the American Face Brick Association, on Humanity, Ethics, and Comparison between Artistic and Commercial Temperaments.

Mr. George C. Nimmons, Chairman of the Educational Committee, A.I.A., mentioned the tentative program of films, etc., which had been submitted to them for their consideration, and action would be taken very shortly. Mr. LeRoy E. Kern, Technical Secretary of the Scientific Research Department, explained fully to the architects the work which is being done by that Department, not only for the Institute but for the Council.

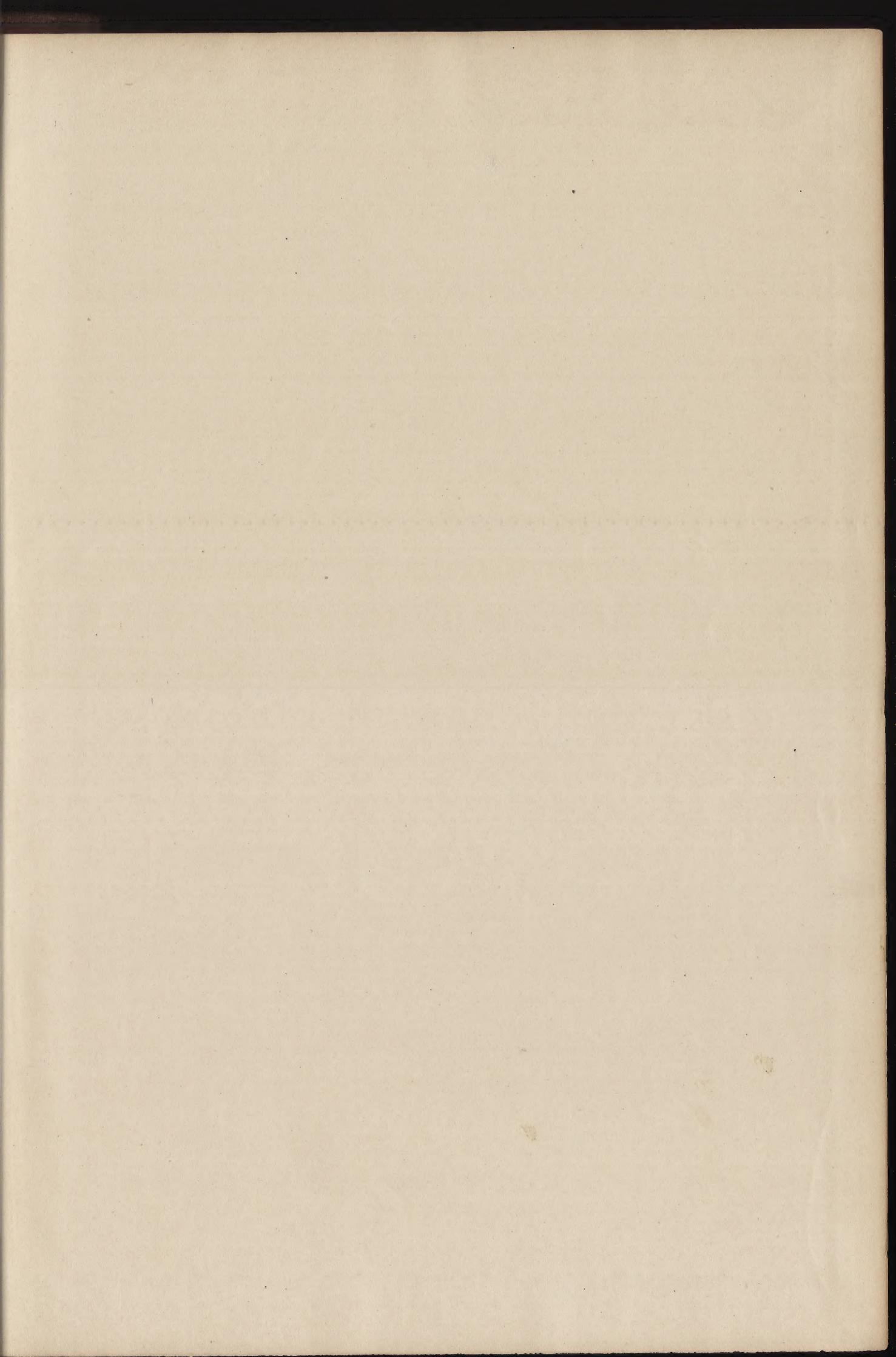
Mr. Irving K. Pond gave a very happy speech and expressed himself as much pleased with the idealistic atmosphere of the evening.

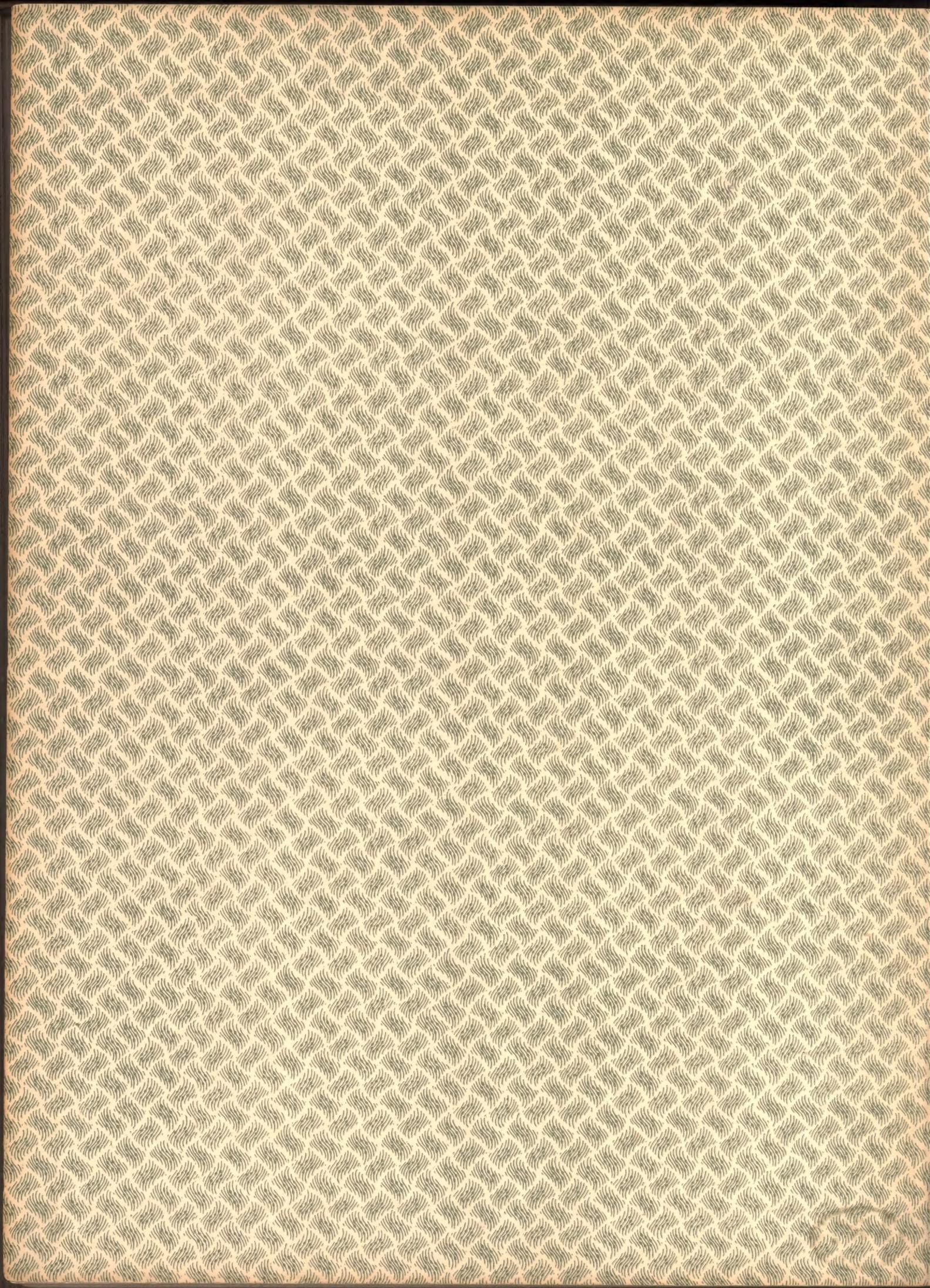
The second day session was opened with a discussion on Promoting the Use of Standard Specifications, by Mr. Kern, and also a discussion by Mr. Samuel Warren, of the Atlas Portland Cement Company, on the responsibility of the architect in seeing that Specifications are followed.

The general discussions of this day, which were participated in by all members and the architects present, were most instructive.









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